VIRGINIA REGISTER OF REGULATIONS

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THE VIRGINIA REGISTER OF REGULATIONS is an official state publication issued every other week throughout the year. Indexes are published quarterly, and are cumulative for the year. The *Virginia Register* has several functions. The new and amended sections of regulations, both as proposed and as finally adopted, are required by law to be published in the *Virginia Register*. In addition, the *Virginia Register* is a source of other information about state government, including petitions for rulemaking, emergency regulations, executive orders issued by the Governor, and notices of public hearings on regulations.

ADOPTION, AMENDMENT, AND REPEAL OF REGULATIONS

Unless exempted by law, an agency wishing to adopt, amend, or repeal regulations must follow the procedures in the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia). Typically, this includes first publishing in the *Virginia Register* a notice of intended regulatory action; a basis, purpose, substance and issues statement; an economic impact analysis prepared by the Department of Planning and Budget; the agency's response to the economic impact analysis; a summary; a notice giving the public an opportunity to comment on the proposal; and the text of the proposed regulation.

Following publication of the proposed regulation in the *Virginia Register*, the promulgating agency receives public comments for a minimum of 60 days. The Governor reviews the proposed regulation to determine if it is necessary to protect the public health, safety, and welfare, and if it is clearly written and easily understandable. If the Governor chooses to comment on the proposed regulation, his comments must be transmitted to the agency and the Registrar of Regulations no later than 15 days following the completion of the 60-day public comment period. The Governor's comments, if any, will be published in the *Virginia Register*. Not less than 15 days following the completion of the 60-day public comment period, the agency may adopt the proposed regulation.

The Joint Commission on Administrative Rules or the appropriate standing committee of each house of the General Assembly may meet during the promulgation or final adoption process and file an objection with the Registrar and the promulgating agency. The objection will be published in the *Virginia Register*. Within 21 days after receipt by the agency of a legislative objection, the agency shall file a response with the Registrar, the objecting legislative body, and the Governor.

When final action is taken, the agency again publishes the text of the regulation as adopted, highlighting all changes made to the proposed regulation and explaining any substantial changes made since publication of the proposal. A 30-day final adoption period begins upon final publication in the *Virginia Register*.

The Governor may review the final regulation during this time and, if he objects, forward his objection to the Registrar and the agency. In addition to or in lieu of filing a formal objection, the Governor may suspend the effective date of a portion or all of a regulation until the end of the next regular General Assembly session by issuing a directive signed by a majority of the members of the appropriate legislative body and the Governor. The Governor's objection or suspension of the regulation, or both, will be published in the *Virginia Register*.

If the Governor finds that the final regulation contains changes made after publication of the proposed regulation that have substantial impact, he may require the agency to provide an additional 30-day public comment period on the changes. Notice of the additional public comment period required by the Governor will be published in the *Virginia Register*. Pursuant to § 2.2-4007.06 of the Code of Virginia, any person may request that the agency solicit additional public comment on certain changes made after publication of the proposed regulation. The agency shall suspend the regulatory process for 30 days upon such request from 25 or more individuals, unless the agency determines that the changes have minor or inconsequential impact.

A regulation becomes effective at the conclusion of the 30-day final adoption period, or at any other later date specified by the promulgating agency, unless (i) a legislative objection has been filed, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the 21-day objection period; (ii) the Governor exercises his authority to require the agency to provide for additional public comment, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the period for which the Governor has provided for additional public comment; (iii) the Governor and the General Assembly exercise their authority to suspend the effective date of a regulation until the end of the next regular legislative session; or (iv) the agency suspends the regulatory process, in which event the regulation, unless withdrawn, becomes effective on the date specified, which shall be after the expiration of the 30-day public comment period and no earlier than 15 days from publication of the readopted action.

A regulatory action may be withdrawn by the promulgating agency at any time before the regulation becomes final.

FAST-TRACK RULEMAKING PROCESS

Section 2.2-4012.1 of the Code of Virginia provides an alternative to the standard process set forth in the Administrative Process Act for regulations deemed by the Governor to be noncontroversial. To use this process, the Governor's concurrence is required and advance notice must be provided to certain legislative committees. Fast-track regulations become effective on the date noted in the regulatory action if fewer than 10 persons object to using the process in accordance with § 2.2-4012.1.

EMERGENCY REGULATIONS

Pursuant to § 2.2-4011 of the Code of Virginia, an agency may adopt emergency regulations if necessitated by an emergency situation or when Virginia statutory law or the appropriation act or federal law or federal regulation requires that a regulation be effective in 280 days or fewer from its enactment. In either situation, approval of the Governor is required. The emergency regulation is effective upon its filing with the Registrar of Regulations, unless a later date is specified per § 2.2-4012 of the Code of Virginia. Emergency regulations are limited to no more than 18 months in duration; however, may be extended for six months under the circumstances noted in § 2.2-4011 D. Emergency regulations are published as soon as possible in the *Virginia Register* and are on the Register of Regulations website at register.dls.virgina.gov.

During the time the emergency regulation is in effect, the agency may proceed with the adoption of permanent regulations in accordance with the Administrative Process Act. If the agency chooses not to adopt the regulations, the emergency status ends when the prescribed time limit expires.

STATEMENT

The foregoing constitutes a generalized statement of the procedures to be followed. For specific statutory language, it is suggested that Article 2 (§ 2.2-4006 et seq.) of Chapter 40 of Title 2.2 of the Code of Virginia be examined carefully.

CITATION TO THE *VIRGINIA REGISTER*

The *Virginia Register* is cited by volume, issue, page number, and date. **34:8 VA.R. 763-832 December 11, 2017,** refers to Volume 34, Issue 8, pages 763 through 832 of the *Virginia Register* issued on December 11, 2017.

The Virginia Register of Regulations is published pursuant to Article 6 (§ 2.2-4031 et seq.) of Chapter 40 of Title 2.2 of the Code of Virginia.

Members of the Virginia Code Commission: **John S. Edwards, Chair; James A. Leftwich, Jr., Vice-Chair; Ward L. Armstrong; Nicole Cheuk; Richard E. Gardiner; Jennifer L. McClellan; Christopher R. Nolen; Steven Popps; Charles S. Sharp; Malfourd W. Trumbo; Amigo R. Wade; Wren M. Williams.**

Staff of the *Virginia Register:* **Holly Trice,** Registrar of Regulations; **Anne Bloomsburg,** Assistant Registrar; **Nikki Clemons,** Regulations Analyst; **Rhonda Dyer,** Publications Assistant; **Terri Edwards,** Senior Operations Staff Assistant.

PUBLICATION SCHEDULE AND DEADLINES

This schedule is available on the Virginia Register of Regulations website (http://register.dls.virginia.gov).

March 2023 through March 2024

Volume: Issue	Material Submitted By Noon*	Will Be Published On
39:15	February 22, 2023	March 13, 2023
39:16	March 8, 2023	March 27, 2023
39:17	March 22, 2023	April 10, 2023
39:18	April 5, 2023	April 24, 2023
39:19	April 19, 2023	May 8, 2023
39:20	May 3, 2023	May 22, 2023
39:21	May 17, 2023	June 5, 2023
39:22	May 31, 2023	June 19, 2023
39:23	June 14, 2023	July 3, 2023
39:24	June 28, 2023	July 17, 2023
39:25	July 12, 2023	July 31, 2023
39:26	July 26, 2023	August 14, 2023
40:1	August 9, 2023	August 28, 2023
40:2	August 23, 2023	September 11, 2023
40:3	September 6, 2023	September 25, 2023
40:4	September 20, 2023	October 9, 2023
40:5	October 4, 2023	October 23, 2023
40:6	October 18, 2023	November 6, 2023
40:7	November 1, 2023	November 20, 2023
40:8	November 14, 2023 **(Tuesday)**	December 4, 2023
40:9	November 29, 2023	December 18, 2023
40:10	December 13, 2023	January 1, 2024
40:11	December 27, 2023	January 15, 2024
40:12	January 10, 2024	January 29, 2024
40:13	January 24, 2024	February 12, 2024
40:14	February 7, 2024	February 26, 2024
40:15	February 21, 2024	March 11, 2024
40:16	March 6, 2024	March 25, 2024

*Filing deadlines are Wednesdays unless otherwise specified.

TITLE 18. PROFESSIONAL AND OCCUPATIONAL LICENSING

BOARD OF PSYCHOLOGY

Agency Decision

Title of Regulation: **18VAC125-20. Regulations Governing the Practice of Psychology.**

Statutory Authority: § 54.1-2400 of the Code of Virginia.

Name of Petitioner: Michael Moates.

Nature of Petitioner's Request: The petitioner requests that the Board of Psychology amend its regulations to register out-of-state providers from locations that do not participate in the Psychology Interjurisdictional Compact to engage in the practice of psychology via telehealth in Virginia.

Agency Decision: Request denied.

Statement of Reason for Decision: The board will take no action on this petition as it is beyond the legal scope of the board to create a new registration category.

Agency Contact: Jaime Hoyle, Executive Director, Board of Psychology, 9960 Mayland Drive, Suite 300, Henrico, VA 23233, telephone (804) 367-4406, or email jaime.hoyle@dhp.virginia.gov.

VA.R. Doc. No. PFR23-09; Filed February 7, 2023, 1:28 p.m.

TITLE 4. CONSERVATION AND NATURAL RESOURCES

MARINE RESOURCES COMMISSION

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-10, Pertaining to Fishing in Broad and Linkhorn Bays**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated January 31, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-670, Pertaining to Recreational Gear Licenses**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without a making change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-730, Pertaining to Nonresident Harvesters License Fee**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-754, Pertaining to Importation of Fish, Shellfish or Crustacea into Virginia's Waters**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-920, Pertaining to Landing Licenses**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-1045, Pertaining to Establishment of Restricted Areas**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-1050, Pertaining to Establishment of Restricted Area -- Huntington Ingalls Industries/Newport News Shipbuilding Company**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-1060, Pertaining to Enlargement of Established Restricted Area -- Dominion Power/Nuclear Power Station**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-1065, Pertaining to Establishment of Restricted Areas**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-1170, Requirements Related to the Purchase of Fish from the Catcher**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-1240, Fisherman Identification Program**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and

promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-1280, Pertaining to Fishing License and Privilege Revocation**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

Report of Findings

Pursuant to §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the Marine Resources Commission conducted a periodic review and a small business impact review of **4VAC20-1320, Pertaining to Establishment of Restricted Area - Maritime Administration James River Reserve Fleet**, and determined that this regulation should be retained as is. The department is publishing its report of findings dated February 7, 2023, to support this decision.

The regulation is clearly written and easily understandable. The regulation is necessary for the protection of public health, safety, and welfare by conserving and promoting the seafood and marine resources of the Commonwealth.

The decision of the agency is to retain this regulation as is without making a change. The regulation as written promotes the general welfare of the seafood industry and conserves and promotes the seafood and marine resources of the Commonwealth.

Based on the Notice of Periodic Review, the agency has received no comments and has determined that there are no recommended amendments to the regulation. The regulation does not have an adverse impact on small businesses and does not overlap, duplicate, or conflict with any known federal or state law or regulation.

Contact Information: Jennifer Farmer, Regulatory Coordinator, Marine Resources Commission, 380 Fenwick Road, Building 96, Fort Monroe, VA 23651, telephone (757) 247-2248.

TITLE 9. ENVIRONMENT

VIRGINIA WASTE MANAGEMENT BOARD

Agency Notice

Pursuant to Executive Order 19 (2022) and §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the following regulation is undergoing a periodic review and a small business impact review: **9VAC20-60, Virginia Hazardous Waste Management Regulations**. The review of this regulation will be guided by the principles in Executive Order 19 (2022). The purpose of a periodic review is to determine whether this regulation should be repealed, amended, or retained in its current form. Public comment is sought on the review of any issue relating to this regulation, including whether the regulation (i) is necessary for the protection of public health, safety, and welfare or for the economical performance of important governmental functions; (ii) minimizes the economic impact on small businesses in a manner consistent with the stated objectives of applicable law; and (iii) is clearly written and easily understandable.

Public comment period begins February 27, 2023, and ends March 20, 2023.

Comments must include the commenter's name and address (physical or email) information in order to receive a response to the comment from the agency. Following the close of the public comment period, a report of both reviews will be posted on the Virginia Regulatory Town Hall and published in the Virginia Register of Regulations.

Contact Information: Lisa A. Ellis, Hazardous Waste Compliance Program Coordinator, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 912-7366.

TITLE 12. HEALTH

STATE BOARD OF HEALTH

Agency Notice

Pursuant to Executive Order 19 (2022) and §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the following regulation is undergoing a periodic review and a small business impact review: **12VAC5-590, Waterworks Regulations**. The review of this regulation will be guided by the principles in Executive Order 19 (2022). The purpose of a periodic review is to determine whether this regulation should be repealed, amended, or retained in its current form. Public comment is sought on the review of any issue relating to this regulation, including whether the regulation (i) is necessary for the protection of public health, safety, and welfare or for the economical performance of important governmental functions; (ii) minimizes the economic impact on small businesses in a manner consistent with the stated objectives of applicable law; and (iii) is clearly written and easily understandable.

Public comment period begins February 27, 2023, and ends March 20, 2023.

Comments must include the commenter's name and address (physical or email) information in order to receive a response to the comment from the agency. Following the close of the public comment period, a report of both reviews will be posted on the Virginia Regulatory Town Hall and published in the Virginia Register of Regulations.

Contact Information: Grant Kronenberg, Director of Compliance and Enforcement, Office of Drinking Water, Virginia Department of Health, James Madison Building, 109 Governor Street, Richmond, VA 23219, telephone (804) 629-0989.

TITLE 22. SOCIAL SERVICES

STATE BOARD OF SOCIAL SERVICES

Agency Notice

Pursuant to Executive Order 19 (2022) and §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the following regulation is undergoing a periodic review and a small business impact review: **22VAC40-680, Virginia Energy Assistance Program - Low Income Home Energy Assistance Program (LIHEAP)**.

The notice of intended regulatory action to amend 22VAC40-680, which is published in this issue of the Virginia Register, serves as the agency notice of announcement.

Contact Information: Denise Surber, Program Manager, Department of Social Services, 801 East Main Street, Richmond, VA 23219, telephone (804) 726-7386.

TITLE 18. PROFESSIONAL AND OCCUPATIONAL LICENSING

BOARD FOR WASTE MANAGEMENT FACILITY OPERATORS

Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the Board for Waste Management Facility Operators intends to consider amending **18VAC155-20, Waste Management Facility Operators Regulations**. The purpose of the proposed action is to amend regulations that are determined to be overly burdensome or no longer applicable and clarify and consolidate regulations in accordance with Governor Youngkin's Executive Directive One (2022).

The agency intends to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: §§ 54.1-201 and 54.1-2211 of the Code of Virginia.

Public Comment Deadline: March 29, 2023.

Agency Contact: Marjorie King, Administrator, Board for Waste Management Facility Operators, 9960 Mayland Drive, Suite 400, Richmond, VA 23233, telephone (804) 367-2785, or email wastemgt@dpor.virginia.gov.

VA.R. Doc. No. R23-7452; Filed January 31, 2023, 9:46 a.m.

TITLE 22. SOCIAL SERVICES

STATE BOARD OF SOCIAL SERVICES

Notice of Intended Regulatory Action

Notice is hereby given in accordance with § 2.2-4007.01 of the Code of Virginia that the State Board of Social Services intends to consider amending **22VAC40-680, Virginia Energy Assistance Program - Low Income Home Energy Assistance Program (LIHEAP)**. The purpose of the proposed action is to extend the eligibility period for the Energy Assistance Program (EAP), add details regarding the assistance provided, and update the information regarding administrative costs for local departments of social services. Other changes will be considered and may be necessary based on public comment received and further review. The regulation, 22VAC40-680, provides the framework for a statewide EAP, including the three components of the EAP, which are fuel, crisis, and cooling. This regulation includes the application periods, eligibility criteria, benefits, and administrative costs for each of the three components.

Additionally, pursuant to Executive Order 19 (2022) and §§ 2.2-4007.1 and 2.2-4017 of the Code of Virginia, the agency is conducting a periodic review and small business impact review of this regulation to determine whether this regulation should be terminated, amended, or retained in its current form. Public comment is sought on the review of any issue relating to this regulation, including whether the regulation (i) is necessary for the protection of public health, safety, and welfare; (ii) minimizes the economic impact on small businesses consistent with the stated objectives of applicable law; and (iii) is clearly written and easily understandable.

The agency does not intend to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: § 63.2-217 of the Code of Virginia.

Public Comment Deadline: March 29, 2023.

Agency Contact: Denise Surber, Program Manager, Department of Social Services, 801 East Main Street, Richmond, VA 23219, telephone (804) 726-7386, FAX (804) 726-7358, or email denise.t.surber@dss.virginia.gov.

VA.R. Doc. No. R23-7081; Filed January 30, 2023, 3:52 p.m.

TITLE 2. AGRICULTURE

BOARD OF AGRICULTURE AND CONSUMER SERVICES

Final Regulation

REGISTRAR'S NOTICE: The Board of Agriculture and Consumer Services is claiming an exemption from the Administrative Process Act in accordance with § 3.2-703 of the Code of Virginia, which exempts quarantine to prevent or retard the spread of a pest into, within, or from the Commonwealth.

Title of Regulation: **2VAC5-336. Regulations for Enforcement of the Virginia Tree and Crop Pests Law - Spotted Lanternfly Quarantine (amending 2VAC5-336-50).**

Statutory Authority: § 3.2-703 of the Code of Virginia.

Effective Date: February 27, 2023.

Agency Contact: David Gianino, Program Manager, Office of Plant Industry Services, Department of Agriculture and Consumer Services, P.O. Box 1163, Richmond, VA 23218, telephone (804) 786-3515, FAX (804) 371-7793, or email david.gianino@vdacs.virginia.gov.

Background: The spotted lanternfly is an invasive pest that feeds on more than 100 plant species, including grapes, pome and stone fruits, maple and walnut trees, hops, and Ailanthus altissima (Tree of Heaven). The spotted lanternfly is a threat to Virginia's grape, apple, hops, and forestry industries and can spread long distances as a result of people moving articles containing spotted lanternfly egg masses, nymphs, or adults. If allowed to spread, this pest could impact Virginia's agricultural and forestry industries. The spotted lanternfly was initially detected in Winchester City and Frederick County in January 2018, spread to Clarke and Warren Counties in 2021, and has subsequently spread into the Cities of Buena Vista, Charlottesville, Harrisonburg, Lexington, Lynchburg, Manassas, Manassas Park, Staunton, and Waynesboro and the Counties of Albemarle, Augusta, Carroll, Page, Prince William, Rockbridge, Rockingham, Shenandoah, and Wythe. Once established, the spotted lanternfly has the potential to spread to noninfested areas through natural means or through the movement of infested articles (artificial spread). The Regulations for Enforcement of the Virginia Tree and Crop Pests Law - Spotted Lanternfly Quarantine (2VAC5-336) are intended to prevent the artificial spread of this pest and establishes steps that businesses and individuals not conducting business must take to ensure that spotted lanternfly are not being artificially spread out of the regulated areas. Expansion of the regulated area became necessary after surveys conducted by the Virginia Department of Agriculture and Consumer Services (VDACS) indicated that populations of the spotted lanternfly had become established in these localities. Eradication efforts targeted to these populations were unsuccessful in eradicating those populations, and eradication is no longer feasible.

Section 3.2-703 of the Code of Virginia requires that, prior to an extension or reduction of a quarantine, the Commissioner of the Department of Agriculture and Consumer Services must provide notice in a newspaper with general circulation in the affected area or direct written notice to those concerned. In an effort to communicate to impacted stakeholders, individuals, and localities, legal notices were published in local newspapers with coverage in the expanded area during the time period covering July 3, 2022, to July 16, 2022. In addition, notification letters regarding expansion of the regulated area were mailed to impacted stakeholders; industry groups; organizations and trade associations; other state agencies; and local governments, including boards of supervisors, city managers, and county administrators, in the expanded area during the time period of May 2022 to June 2022.

Summary:

The amendments expand the regulated area of the spotted lanternfly quarantine to include the Cities of Buena Vista, Charlottesville, Harrisonburg, Lexington, Lynchburg, Manassas, Manassas Park, Staunton, and Waynesboro and the Counties of Albemarle, Augusta, Carroll, Page, Prince William, Rockbridge, Rockingham, Shenandoah, and Wythe due to an increase in spotted lanternfly populations in these localities.

2VAC5-336-50. Regulated areas.

The following areas in Virginia are quarantined for Spotted Lanternfly:

1. The entire following counties:

a. Albemarle;

b. Augusta;

c. Carroll;

d. Clarke;

~~b.~~ e. Frederick; ~~and~~

~~c.~~ f. Page;

g. Prince William;

h. Rockbridge;

i. Rockingham;

j. Shenandoah;

k. Warren; and

l. Wythe.

2. The entire ~~City of~~ following Cities of:

a. Buena Vista;

b. Charlottesville;

c. Harrisonburg;

d. Lexington;

e. Lynchburg;

f. Manassas;

g. Manassas Park;

h. Staunton;

i. Waynesboro; and

j. Winchester.

VA.R. Doc. No. R23-7308; Filed February 6, 2023, 11:22 a.m.

TITLE 11. GAMING

CHARITABLE GAMING BOARD

Final Regulation

REGISTRAR'S NOTICE: The Department of Agriculture and Consumer Services is claiming an exemption from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 4 a of the Code of Virginia, which excludes regulations that are necessary to conform to changes in Virginia statutory law or the appropriation act where no agency discretion is involved, to repeal the Charitable Gaming Regulations under agency 11VAC15, Charitable Gaming Board, as a custodial act peripheral to promulgating replacement regulations under the authority of the Commissioner of the Department of Agriculture and Consumer Services. The department will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Title of Regulation: **11VAC15-40. Charitable Gaming Regulations (repealing 11VAC15-40-10 through 11VAC15-40-610).**

Statutory Authority: § 18.2-340.15 of the Code of Virginia.

Effective Date: March 29, 2023.

Agency Contact: Michael Menefee, Program Manager, Charitable and Regulatory Programs, Department of Agriculture and Consumer Services, 102 Governor Street, Richmond, VA 23219, telephone (804) 786-3983, FAX (804) 371-7479, or email michael.menefee@vdacs.virginia.gov.

Summary:

Pursuant to Chapters 554 and 609 of the 2022 Acts of Assembly, this action repeals the Charitable Gaming Board Charitable Gaming Regulations (11VAC15-40). Chapters 554 and 609 provide, in part, that the regulations of the Charitable Gaming Board shall be administered by the Department of Agriculture and Consumer Services and shall remain in full force and effect until the Commissioner of the Department of Agriculture and Consumer Services promulgates regulations. The department is currently conducting a regulatory action to promulgate Charitable Gaming Regulations under the authority of the commissioner at 11VAC20-20; see the final regulatory action published in this issue of the Virginia Register of Regulations. The Charitable Gaming Regulations (11VAC20-20) will include (i) the regulatory requirements previously provided in 11VAC15-40 and (i) new provisions regarding electronic gaming.

The repeal of Charitable Gaming Regulations (11VAC15-40) and replacement with the new chapter under the Department of Agriculture and Consumer services at 11VAC20-20 will become effective on the same date.

VA.R. Doc. No. R23-7445; Filed February 3, 2023, 10:40 a.m.

DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES, CHARITABLE GAMING

Final Regulation

REGISTRAR'S NOTICE: The Department of Agriculture and Consumer Services is claiming an exemption from Article 2 of the Administrative Process Act in accordance with § 2.2-4006 A 4 a of the Code of Virginia, which excludes regulations that are necessary to conform to changes in Virginia statutory law or the appropriation act where no agency discretion is involved, to promulgate replacement regulations for the Charitable Gaming Regulations (11VAC15). The department will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Title of Regulation: **11VAC20-20. Charitable Gaming Regulations (adding 11VAC20-20-10 through 11VAC20-20-610).**

Statutory Authority: § 18.2-340.15 of the Code of Virginia.

Effective Date: March 29, 2023.

Agency Contact: Michael Menefee, Program Manager, Charitable and Regulatory Programs, Department of Agriculture and Consumer Services, 102 Governor Street, Richmond, VA 23219, telephone (804) 786-3983, FAX (804) 371-7479, or email michael.menefee@vdacs.virginia.gov.

Background: Chapters 554 and 609 of the 2022 Acts of Assembly authorize the Commissioner of the Department of Agriculture and Consumer Services (VDACS) to promulgate

regulations prescribing conditions under which charitable gaming shall be conducted in the Commonwealth. Previously, the authority to adopt regulations regarding the conduct of charitable gaming rested with the Charitable Gaming Board. Additionally, in accordance with Chapters 722 and 767 of the 2022 Acts of Assembly, VDACS held a 30-day public comment period on this proposed regulation from October 24, 2022, to November 23, 2022, and a virtual public hearing on the proposed regulation on November 15, 2022. During the 30-day public comment period, VDACS received over 470 comments on the proposed regulation. A summary of comments made by the public and the agency's response may be obtained from the promulgating agency or viewed at the office of the Registrar of Regulations.

Summary:

This regulatory action establishes rules for the conduct of charitable gaming in the Commonwealth. Additionally, this action establishes rules for electronic charitable gaming, including (i) requiring that a minimum of 20% of an organization's electronic gaming adjusted gross receipts must be used for the organization's charitable purpose, which maintains the requirement currently established in 11VAC15-40 that a minimum of 10% of an organization's gross receipts from all other charitable gaming must be used for the organization's charitable purpose; (ii) requiring social organizations to obtain and maintain an authorization from VDACS to conduct electronic gaming, which includes the documents that must be provided to VDACS, prohibited acts, recordkeeping, and bank account requirements; (iii) outlining the process by which VDACS may suspend, revoke, or reinstate authorizations to conduct electronic gaming; (iv) establishing a fee of $200 to obtain an authorization to conduct electronic gaming in addition to the required charitable gaming permit fee and a late fee to be assessed on an electronic gaming manufacturer that fails to submit required reports; (v) prescribing the conditions under which a social organization may lease its premises to a qualified organization to conduct electronic gaming, including required documentation and requirements for the lease agreement between the social organization and qualified organization that intends to lease the social organization's premises to conduct charitable gaming, and requiring that the lease agreement must be provided to VDACS for review; and (vi) establishing the audit and administration fee at one-half of 1.0% of an organization's electronic gaming adjusted gross receipts, which is in addition to the fee of one-quarter of 1.0% required by § 18.2-340.31 of the Code of Virginia.

Chapter 20
Charitable Gaming Regulations

Part I
Definitions

11VAC20-20-10. Definitions.

In addition to the definitions contained in § 18.2-340.16 of the Code of Virginia, the following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Agent" means any person authorized by a supplier, network bingo provider, or manufacturer to act for or in place of such supplier, network bingo provider, or manufacturer.

"Board of directors" means the board of directors, managing committee, or other supervisory body of a qualified organization.

"Calendar day" means the period of 24 consecutive hours commencing at 12:00:01 a.m. and concluding at midnight.

"Calendar week" means the period of seven consecutive calendar days commencing at 12:00:01 a.m. on Sunday and ending at midnight the following Saturday.

"Cash" means United States currency or coinage.

"Charitable Gaming Law" means Article 1.1:1 (§ 18.2-340.15 et seq.) of Chapter 8 of Title 18.2 of the Code of Virginia.

"Commissioner" means the Commissioner of the Virginia Department of Agriculture and Consumer Services.

"Concealed face bingo card" means a nonreusable bingo card constructed to conceal the card face.

"Conduct" means the actions associated with the provision of a gaming operation during and immediately before or after the permitted activity, which may include (i) selling bingo cards or packs, electronic bingo devices, instant bingo or pull-tab cards, electronic pull-tab devices, electronic pull-tabs, network bingo cards, or raffle tickets; (ii) calling bingo games; (iii) distributing prizes; and (iv) any other services provided by game workers.

"Control program" means software involved in any critical game function.

"Daubing" means covering a square containing a number called with indelible ink or otherwise marking a number called on a card or an electronic facsimile of a card.

"Deal" means each separate package or series of packages consisting of one game of instant bingo, pull-tabs, or seal cards with the same serial number.

"Decision bingo" means a bingo game where the cost to a player to play is dependent on the number of bingo numbers called, and the prize payout is in direct relationship to the number of participants and the number of bingo numbers called

but shall not exceed statutory prize limits for a regular bingo game.

"Department" means the Virginia Department of Agriculture and Consumer Services.

"Designator" means an object used in the bingo number selection process, such as a ping-pong ball, upon which bingo letters and numbers are imprinted.

"Device number" means the unique serial number assigned to each electronic gaming device by the department and displayed on the device tag affixed by the department.

"Device tag" means the mark that contains a unique serial number assigned to each electronic gaming device that is affixed by the department to each electronic gaming device indicating that the department has authorized and approved the use of such device.

"Discount" means any reduction in cost of admission or game packs or any other purchases through use of coupons, free packs, or other similar methods.

"Disinterested player" means a player who is unbiased.

"Disposable bingo paper" or "disposable paper" means a nonreusable, paper bingo card manufactured with preprinted numbers.

"Distributed pull-tab system" means a computer system consisting of a computer [~~or computers~~] and associated equipment for the use of distributing a finite number of electronic pull-tabs, a certain number of which entitle a player to prize awards at various levels.

"Door prize" means any prize awarded by the random drawing or random selection of a name or number based solely on attendance at a charitable gaming activity.

"Electronic bingo device" means an electronic unit that uses proprietary software or hardware, or operates in conjunction with commonly available software and computers to display facsimiles of bingo cards and allows a player to daub such cards or allows for the automatic daubing of such cards.

"Electronic gaming" or "electronic games" means any instant bingo, pull-tabs, or seal card gaming that is conducted primarily by use of an electronic device. "Electronic gaming" does not include (i) the game of chance identified in clause (ii) of the definition of "bingo" in § 18.2-340.16 of the Code of Virginia or (ii) network bingo.

"Electronic gaming device" means an electronic unit used to facilitate the play of an electronic pull-tab. An electronic pull-tab device may take the form of an upright cabinet or a handheld device or may be of any other composition as approved by the department.

"Electronic gaming adjusted gross receipts" means the gross receipts derived from electronic gaming less the total amount in prize money paid out to players.

"Electronic gaming manufacturer" means a manufacturer of electronic devices used to conduct electronic gaming.

"Electronic pull-tabs" means a form of electronic gaming using an electronic version of a single instant bingo card or pull-tab. An electronic pull-tab is a predetermined game outcome in electronic form, distributed on-demand from a finite number of game outcomes by a distributed pull-tab system.

"Equipment and video systems" means equipment that facilitates the conduct of charitable gaming, such as ball blowers, flashboards, electronic verifiers, and replacement parts for such equipment. Equipment and video systems shall not include dispensing devices, electronic bingo devices, and electronic pull-tab devices.

"Event game" means a bingo game [(i)] that is played using instant bingo cards or pull-tabs in which the winners include both instant winners and winners who are determined by the random draw of a bingo ball, the random call of a bingo number, or the use of a seal card, and [(ii)] that is sold in its entirety and played to completion during a single bingo session.

"Fiscal year" or "annual reporting period" means the 12-month period beginning January 1 and ending December 31 of any given year.

"Flare" means a printed or electronic display that bears information relating to the name of the manufacturer or logo, name of the game, card count, cost per play, serial number, number of prizes to be awarded, and specific prize amounts in a deal of instant bingo, pull-tab, seal cards, or electronic pull-tabs.

"Free space number," "perm number," "center number," "card number," or "face number" means the number generally printed in the center space of a bingo card that identifies the unique pattern of numbers printed on that card.

"Game program" means a written list of all games to be played including the sales price of all bingo paper, network bingo cards, and electronic bingo devices, pack configuration, prize amounts to be paid during a session for each game, and an indication whether prize amounts are fixed based on attendance.

"Game set" means the entire pool of electronic pull-tabs that contains predefined and randomized game results assigned under a unique serial number. This term is equivalent to "deal" or "deck."

"Game subset" means a division of a game set into equal sizes.

"Immediate family" means one's spouse, parent, child, sibling, grandchild, grandparent, mother or father-in-law, or stepchild.

"Interested persons" means [(i)] the president, an officer, or a game manager of any qualified organization that is exempt or is a permit applicant or holds a permit to conduct charitable gaming, or [(ii)] the owner, director, officer, or partner of an entity engaged in supplying charitable gaming supplies to organizations, engaged in providing network bingo supplies to organizations, or engaged in manufacturing any component of an electronic game that is distributed in the Commonwealth.

"IRS" means the U.S. Internal Revenue Service.

"Management" means the provision of oversight of a gaming operation, which may include the responsibilities of applying for and maintaining a permit or authorization; compiling, submitting, and maintaining required records and financial reports; and ensuring that all aspects of the operation are in compliance with all applicable statutes and regulations.

"Manufacturer" means a person who or entity that assembles from raw materials or subparts a completed piece of bingo equipment or supplies, a distributed pull-tab system, or other charitable gaming or electronic gaming equipment or supplies. "Manufacturer" also means a person who or entity that modifies, converts, adds, or removes parts to or from bingo equipment or supplies, a distributed pull-tab system, or other charitable gaming or electronic gaming equipment or supplies to further their promotion or sale for the conduct of charitable gaming.

"Operation" means the activities associated with production of a charitable gaming or electronic gaming activity, which may include (i) the direct on-site supervision of the conduct of charitable gaming and electronic gaming; (ii) coordination of game workers; and (iii) all responsibilities of charitable gaming and electronic gaming designated by the organization's management.

"Organization number" means a unique identification number issued by the department.

"Owner" means any individual with financial interest of 10% or more in a supplier, network bingo provider, or a manufacturer of a distributed pull-tab system or other electronic gaming device or system distributed in the Commonwealth.

"Pack" means sheets of bingo paper or electronic facsimiles assembled in the order of games to be played. This shall not include any raffle.

"Prize" means cash, merchandise, certificate, or other item of value awarded to a winning player.

"Progressive bingo" means a bingo game in which the prize is carried forward to the next game if a predetermined pattern is not completed within a specified number of bingo numbers called.

"Progressive seal card" means a seal card game in which a prize is carried forward to the next deal if not won when a deal is completed.

"Remuneration" means payment in cash or the provision of anything of value for goods provided or services rendered.

"Seal card" means a board or placard used in conjunction with a deal of the same serial number that contains one or more concealed areas that when removed or opened, reveal a predesignated winning number, letter, or symbol located on that board or placard.

"Selection device" means a manually or mechanically operated device used to randomly select bingo numbers.

"Serial number" means a unique number assigned by the manufacturer to each set of bingo cards or network bingo cards; each instant bingo, pull-tab, or seal card in a deal; each electronic bingo device; each door prize ticket; each game set and game subset of electronic pull-tabs; and each electronic gaming device.

"Series number" means the number of unique card faces contained in a set of disposable bingo paper cards, network bingo cards, or bingo hard cards. A 9000 series, for example, has 9,000 unique faces.

"Session" means a period of time during which one or more bingo games are conducted or during which instant bingo, pull-tabs, seal cards, or electronic gaming may be sold and redeemed. A session begins with the sale of instant bingo, pull-tabs, seal cards, electronic gaming, electronic bingo devices, network bingo cards, or bingo cards or packs.

"Social organization" means the same as that term is defined in § 18.2-340.16 of the Code of Virginia.

"Social quarters" means the same as that term is defined in § 18.2-340.16 of the Code of Virginia.

"Treasure chest" means a raffle including a locked treasure chest containing a prize that a participant, selected through some other authorized charitable game, is afforded the chance to select from a series of keys a predetermined key that will open the locked treasure chest to win a prize.

"Use of proceeds" means the use of funds derived by an organization from its charitable gaming activities, which are disbursed for those lawful religious, charitable, community, or educational purposes.

"Voucher" means a printed ticket tendered to the player, upon request, for any unused game plays or winnings that remain on the electronic pull-tab device.

"WINGO" means a variation of a traditional bingo game that uses visual devices rather than a verbal caller and is intended for play by hearing impaired persons.

Part II
Charitable Gaming Organizations

Article 1
Permits

11VAC20-20-20. Eligibility for permit to conduct charitable gaming; when valid; permit requirements.

A. The conduct of charitable gaming is a privilege that may be granted or denied by the department. Except as provided in § 18.2-340.23 of the Code of Virginia, every eligible organization, volunteer fire department, and rescue squad with anticipated gross gaming receipts that exceed the amount set forth in § 18.2-340.23 of the Code of Virginia in any 12-month period shall obtain a permit from the department prior to the commencement of charitable gaming activities. To be eligible for a permit, an organization must meet all of the requirements of § 18.2-340.24 of the Code of Virginia.

B. Pursuant to § 18.2-340.24 B of the Code of Virginia, the department shall review a tax exempt request submitted to the IRS for a tax exempt status determination and may issue an interim certification of tax-exempt status solely for the purpose of charitable gaming, conditioned upon a determination by the IRS. The department shall charge the fee set forth in § 18.2-340.24 B of the Code of Virginia for this review. The fee shall be payable to the Treasurer of Virginia.

C. A permit shall be valid only for activities, locations, days, dates, and times as listed on the permit. A permit alone does not authorize an organization to conduct electronic gaming. An organization that conducts electronic gaming must have a separate electronic gaming authorization on its permit.

D. In accordance with § 18.2-340.19 A 1 of the Code of Virginia, as a condition of receiving a charitable gaming permit or authorization to conduct electronic gaming, an organization shall use a minimum percentage of its charitable gaming receipts for those lawful religious, charitable, community, or educational purposes for which the organization is specifically chartered or organized as follows:

1. For all charitable gaming other than electronic gaming, the minimum percentage shall be 10% of its gross receipts.

2. For electronic gaming, the minimum percentage shall be [~~40~~ 20] % of its electronic gaming adjusted gross receipts.

E. If an organization fails to meet the minimum use of proceeds requirement for charitable gaming other than electronic gaming, its permit [~~shall~~ may] be suspended or revoked; however, the department shall not suspend or revoke the permit for charitable gaming of any organization solely because of its failure to meet the required percentage without having first provided the organization with an opportunity to implement a remedial business plan.

F. An organization may request a temporary reduction in the predetermined percentage specified in subsection D of this section from the department. In reviewing such a request, the department shall consider such factors appropriate to and consistent with the purpose of charitable gaming, which may include (i) the organization's overall financial condition; (ii) the length of time the organization has been involved in charitable gaming; (iii) the extent of the deficiency; and (iv) the progress that the organization has made in attaining the minimum percentage in accordance with a remedial business plan pursuant to subsection E of this section.

G. An organization whose permit is revoked for failure to comply with provisions set forth in subsection D of this section shall be eligible to reapply for a permit at the end of one year from the date of revocation. The department, at its discretion, may issue the permit if it is satisfied that the organization has made substantial efforts toward meeting its remedial business plan.

H. If an organization fails to meet the minimum use of proceeds requirement for electronic gaming:

1. The social organization's authorization to conduct electronic gaming [~~shall~~ may] be revoked or suspended.

2. The qualified [~~organizations~~ organization's] permit for the conduct of electronic gaming only [~~shall~~ may] be revoked or suspended.

3. If an organization becomes dissolved for any reason, then the department shall either suspend or revoke its authorization to conduct electronic gaming.

4. If the [permit or] authorization is suspended, the department shall set the terms of the suspension, which shall include the length of the suspension and a requirement that prior to reinstatement of the permit [or authorization], the organization shall submit a remedial business plan approved by the department to address the conditions that resulted in the suspension.

5. If an organization fails to meet the minimum use of proceeds requirement after having been suspended, the organization's authorization shall be revoked. An organization whose permit is revoked shall be eligible to reapply [~~for an authorization one year from the date of revocation~~ at a date determined by the department]. If the permit is revoked, the organization is required to reapply for an authorization, and if the authorization was revoked [~~less~~ fewer] than 18 months prior to reapplying for a permit, then the organization shall submit a remedial business plan approved by the department to address the conditions that resulted in the revocation. The department, at its discretion, may issue the authorization if it is satisfied that the organization's remedial business plan will result in meeting the use of proceeds requirement.

11VAC20-20-30. Charitable gaming permit application process for raffles, bingo, paper pull-tabs, network bingo, paper instant bingo, and paper seal cards.

A. Any organization (i) anticipating gross gaming receipts from raffles that exceed the amount set forth in § 18.2-340.23 of the Code of Virginia or (ii) intending to operate and conduct bingo, electronic gaming, instant bingo, seal cards, pull-tabs, or network bingo shall complete a department-prescribed application to request issuance or renewal of an annual permit to conduct charitable gaming. Organizations shall submit a nonrefundable fee payable to the Treasurer of Virginia in the amount of $200 with the application, unless the organization is exempt from such fee pursuant to § 18.2-340.23 of the Code of Virginia.

B. The department may initiate action against any organization exempt from permit requirements when it reasonably believes the organization is not in compliance with the provisions of Charitable Gaming Law or regulations adopted pursuant thereto.

C. Permits shall be valid for a period of one year from the date of issuance or for a period specified on the permit. The department may issue permits for periods of less than one year.

D. Permits shall be granted only after a background investigation of an organization, interested persons, or both to ensure public safety and welfare as required by § 18.2-340.25 of the Code of Virginia. Investigations shall consider the nature, the age and severity, and the potential harm to public safety and welfare of any criminal offenses. The investigation may include the following:

1. A search of criminal history records for the chief executive officer and chief financial officer of the organization. Information and authorization to conduct these records checks shall be provided in the permit application. In addition, the department shall require that the organization provides assurances that all other members involved in the management, operation, or conduct of charitable gaming meet the requirements of subdivision 12 of § 18.2-340.33 of the Code of Virginia. Applications may be denied if:

a. Any person participating in the management of any charitable gaming has ever been:

(1) Convicted of a felony; or

(2) Convicted of any misdemeanor involving fraud, theft, or financial crimes within the preceding five years.

b. Any person participating in the conduct of charitable gaming has been:

(1) Convicted of any felony in the preceding 10 years; or

(2) Convicted of any misdemeanor involving fraud, theft, or financial crimes within the preceding five years;

2. An inquiry as to whether the organization has been granted tax-exempt status pursuant to § 501(c) by the Internal Revenue Service and is in compliance with IRS annual filing requirements;

3. An inquiry as to whether the organization has entered into any contract with, or has otherwise employed for compensation, any persons for the purpose of organizing or managing, operating, or conducting any charitable gaming activity;

4. Inquiries into the finances and activities of the organization and the sources and uses of funds;

5. Inquiries into the level of community or financial support to the organization and the level of community involvement in the membership and management of the organization; and

6. An inquiry as to whether the organization operates in accordance with the provisions of or is in violation of any provision of the Charitable Gaming Law or regulations promulgated pursuant thereto.

E. The permit application for an organization that has not previously held a permit shall include:

1. A copy of the articles of incorporation, bylaws, charter, constitution, or other appropriate organizing document;

2. A copy of the determination letter issued by the IRS under § 501(c) of the Internal Revenue Code, if appropriate, or a letter from the national office of an organization indicating the applicant organization is in good standing and is currently covered by a group exemption ruling. A letter of good standing is not required if the applicable national or state office has furnished the department with a listing of member organizations in good standing in the Commonwealth as of January 1 of each year and has agreed to promptly provide the department any changes to the listing as they occur;

3. A copy of the written lease or proposed written lease agreement and all other agreements if the organization rents or intends to rent a facility where bingo or electronic gaming is or will be conducted. Information on the lease shall include name, address, and telephone number of the landlord; maximum occupancy of the building; and the rental amount per session; and

4. An authorization by an officer or other appropriate official of the organization to permit the department to determine whether the organization has been investigated or examined by the IRS in connection with charitable gaming activities during the previous three years.

F. Any contracts or any other agreements with landlords, suppliers, network bingo providers, social organizations, or manufacturers to which the organization is or may be a party.

G. Copies of minutes of meetings of the organization may be requested by the department prior to rendering a permitting decision.

H. Organizations applying to renew a permit previously issued by the department shall submit articles of incorporation, bylaws, charter, constitution, or other organizing document; IRS determination letter; any new contract or agreement with a landlord, supplier, network bingo provider, social organization, or manufacturer to which the organization is or may be a party; and a copy of any lease with any landlord or social organization if there are any amendments or changes to these documents.

I. Organizations may request permits to conduct joint bingo games as provided in § 18.2-340.29 of the Code of Virginia.

1. In the case of a joint bingo game, each organization shall file a permit application.

2. The nonrefundable permit fee for joint bingo games shall be a total of $200. However, no permit application fee is due if each of the organizations is exempt from the application fee pursuant to § 18.2-340.23 of the Code of Virginia.

3. A single permit may be issued in the names of all the organizations conducting a joint bingo game. All restrictions and prohibitions applying to single organizations shall apply to qualified organizations jointly conducting bingo games pursuant to § 18.2-340.29 of the Code of Virginia.

4. No joint bingo game shall be conducted prior to the issuance of a joint permit.

5. Applications for joint bingo games shall include an explanation of the division of manpower, costs, and proceeds for the joint bingo game.

J. An organization wishing to change dates, times, or locations of its charitable gaming shall request an amendment to its permit. Amendment requests shall be made in writing on a form prescribed by the department in advance of the proposed effective date.

K. An organization may cancel its charitable gaming due to inclement weather, disasters, or other circumstances outside the organization's control without an amendment to its permit.

L. An organization may sell raffle tickets for a drawing to be held outside of the Commonwealth of Virginia in the United States provided:

1. The raffle is conducted by the organization in conjunction with a meeting outside the Commonwealth of Virginia or with another organization that is licensed to conduct raffles outside the Commonwealth of Virginia;

2. The raffle is conducted in accordance with this chapter and the laws and regulations of the state where the drawing is to be held; and

3. The portion of the proceeds derived from the sale of raffle tickets in the Commonwealth is reported to the department.

M. Any permitted organization that ceases to conduct charitable gaming shall immediately notify the department in writing and provide the department a report as to the disposition of all unused charitable gaming supplies or electronic gaming devices on a form prescribed by the department.

11VAC20-20-40. Charitable gaming authorization for electronic gaming.

A. The operation and conduct of electronic gaming is a privilege that may be granted or denied by the department. A social organization desiring to operate and conduct electronic gaming shall obtain a permit to conduct charitable gaming and an authorization to operate and conduct electronic gaming from the department prior to the commencement of any electronic gaming. To be eligible for a permit or an authorization, a social organization must meet all of the requirements of the Charitable Gaming Law and regulations adopted pursuant thereto.

B. A social organization desiring to operate and conduct electronic gaming shall complete a department-prescribed application to request a new or to renew an existing authorization. The social organization must provide the [~~number~~ quantity] of electronic gaming devices it intends to operate on the premises at the time when the authorization is issued to the organization. In accordance with §§ 18.2-340.23 and 18.2-340.26:3 of the Code of Virginia, a social organization shall submit a nonrefundable application fee payable to the Treasurer of Virginia in the amount of $200 in addition to the fee prescribed for the charitable gaming permit.

C. If an organization's charitable gaming permit is denied pursuant to 11VAC20-20-20 and 11VAC20-20-50, then its request for a new or renewal authorization to operate and conduct electronic gaming shall be denied by the department.

D. An authorization to operate and conduct electronic gaming shall be valid for one year from the date of issuance. The department may issue an authorization that is valid for less than one year or up to two years when it determines that such is necessary. Authorizations shall be noted on the charitable gaming permit, and the expiration date for the authorization shall be the same as the charitable gaming permit expiration date.

E. An authorization to operate and conduct electronic gaming shall be valid only for the operation and conduct of electronic gaming at the primary location; on the days of the week, dates, and times; and for the [~~number~~ quantity] of electronic gaming devices listed on the [~~authorization~~ permit].

1. A social organization shall designate a [~~continuous~~ contiguous] area within its primary location as its social quarters. A social organization's social quarters shall not include any area that is included in the public space leased to a qualified organization so that the qualified organization may operate and conduct electronic gaming.

2. A social organization shall designate a [~~continuous~~ contiguous] area within its primary location as its public space. A social organization's public space shall not include any area that is included in its social quarters. A social organization may lease its public space to a qualified organization so that the qualified organization may operate and conduct electronic gaming.

3. The primary location shall have a unique physical address established by the United States Postal Service and a certificate of occupancy issued by the city, county, or town where the building is physically located.

4. The social organization's principal place of business as registered with the State Corporation Commission shall be its primary location so long as the principal place of business is where the organization conducts its business. The operation and conduct of electronic gaming alone does not constitute the conduct of business for the purpose of determining a social organization's primary location. If the social organization is not registered with the State Corporation Commission, then the social organization's primary location shall be (i) the location where the organization conducts its business and (ii) if requested by the department, confirmed by the affiliated national or state organization as the social organization's primary location.

5. Upon request of the department, the social organization shall provide sufficient documentation to identify its primary location. If the social organization is unable or unwilling to provide such documentation, then the department shall deny the social organization's application for authorization to operate and conduct electronic gaming in accordance with 11VAC20-20-50.

F. A social organization authorized to operate and conduct electronic gaming that wishes to change dates, times, primary location, or the [~~number~~ quantity] of electronic gaming devices identified on its authorization shall request an amendment to its authorization. Amendment requests shall be made in writing on a form prescribed by the department. The social organization must receive an amended authorization prior to implementing the requested amendment. At no time shall a social organization's authorization reflect a number of devices that is inconsistent with the number of electronic gaming devices at their location.

G. A social organization shall notify on a form prescribed by the department when it purchases or leases [~~a new~~ any additional] distributed pull-tab system or electronic gaming device [beyond the quantity already identified on its authorization].

H. A social organization may cancel its scheduled electronic gaming session due to inclement weather, disaster, or other circumstance outside the organization's control without an amendment to its authorization. The social organization shall immediately notify the department of the cancellation.

I. [~~Any authorized~~ A] social organization that ceases to operate and conduct electronic gaming shall immediately notify the department in writing and provide a report to the department as to the disposition of any distributed pull-tab system or electronic gaming devices.

J. A social organization authorized to operate and conduct electronic gaming shall not use an electronic gaming device that does not bear a device tag affixed by the department.

K. [~~A social organization authorized to operate and conduct electronic gaming shall expend, at a minimum, 40% of its electronic gaming adjusted gross receipts for those lawful religious, charitable, community, or educational purposes for which the organization is specifically chartered or organized.~~

~~L.~~] If an organization determines at any point prior to the close of the fiscal year that it may not meet the requirement established in 11VAC20-20-20 D, an organization may request a temporary reduction in the percentage specified in 11VAC20-20-20 D from the department. In reviewing such a request, the department may consider such factors appropriate to and consistent with the purpose of charitable gaming, which may include (i) the organization's overall financial condition; (ii) the length of time the organization has been involved in charitable gaming and electronic gaming; and (iii) the extent of the deficiency. The department may grant a temporary reduction at its discretion; however, the department will not grant a temporary reduction after the close of the fiscal year.

[~~M.~~ L.] A social organization authorized to operate and conduct electronic gaming shall:

1. Maintain a valid charitable gaming permit. If the department suspends or revokes a social organization's charitable gaming permit, the department shall take the same action against the social organization's authorization to operate and conduct electronic gaming;

2. Maintain its federal tax exempt status;

3. Maintain eligibility for its federal tax exempt status by continuing to meet the IRS criteria for that tax exemption;

4. Not possess more electronic gaming devices at its primary location than the [~~number~~ quantity] of such devices listed on its authorization;

5. Operate only [~~an~~] electronic gaming [~~device~~ devices] that [~~has~~ have] a device tag affixed by the department;

6. Acquire, lease, obtain, purchase, rent, or use a distributed pull-tab system or electronic gaming device from a manufacturer or supplier that has a current permit issued by the department pursuant to § 18.2-340.34 of the Code of Virginia;

7. Not inure any part of its [~~net earnings~~ electronic gaming adjusted gross receipts] to benefit a private shareholder or individual; and

8. Not violate a provision of or fail to meet a requirement of the Charitable Gaming Law or a regulation adopted pursuant thereto.

[~~N.~~ M.] In addition to the requirements established in subsection [~~M~~ L] of this section, a social organization authorized to operate and conduct electronic gaming that is a fraternal organization shall:

1. Serve a fraternal purpose;

2. Have a substantial program of fraternal activities, as defined by the IRS;

3. Be distinguishable from its chartering parent organization; and

4. Be largely self-governing and have its own officers, bylaws, or other governing documents and its own general financial independence from its parent organization.

[~~O.~~ N.] In addition to the requirements established in subsection [~~M~~ L] of this section, a [~~social~~ qualified] organization [that is a social organization as defined in subdivision 4 of the definition of "social organization" in § 18.2-340.16 of the Code of Virginia and is] authorized to operate and conduct electronic gaming [~~that is substantially composed of past or present members of the U.S. Armed Forces~~] must continue to be substantially composed of past or present members of the U.S. Armed Forces.

[~~P.~~ O.] The department may suspend or revoke the authorization to operate and conduct electronic gaming of a social organization that does not comply with subsection [L,] M, [or] N [~~, or O~~] of this section.

11VAC20-20-50. Suspension, revocation, or denial of permit and authorization.

A. Pursuant to § 18.2-340.20 of the Code of Virginia, the department may suspend, revoke, or deny the permit to conduct charitable gaming or authorization to operate and conduct electronic gaming of any organization for cause, including any of the following reasons:

1. The organization is found to be in violation of or has failed to meet any of the requirements of the Charitable Gaming Law or regulations governing the management, operation, and conduct of charitable gaming or electronic gaming in the Commonwealth.

2. The organization is found to be not in good standing with its state or national organization.

3. The IRS revokes or suspends the organization's federal tax-exempt status.

4. The organization willfully and knowingly provides false information in its application for a permit to conduct charitable gaming.

5. The organization is found to have a member involved in the management, operation, or conduct of its charitable gaming who has been convicted of any felony or any misdemeanor as follows:

a. For any person participating in the management or operation of any charitable gaming:

(1) Convicted of a felony; or

(2) Convicted of any misdemeanor involving fraud, theft, or financial crimes within the preceding five years.

b. For any person participating in the conduct of charitable gaming:

(1) Convicted of any felony within the preceding 10 years; or

(2) Convicted of any misdemeanor involving fraud, theft, or financial crimes within the preceding five years.

B. The failure to meet any of the requirements of § 18.2-340.24 of the Code of Virginia shall cause the denial of the permit, and no organization shall conduct any charitable gaming until the requirements are met and a permit is obtained.

C. The failure to meet the definition of a social organization or the requirements in § 18.2-340.26:1 shall cause the denial of the authorization to conduct electronic gaming, and no organization shall conduct electronic gaming until the requirements are met and an authorization is obtained.

D. Except when an organization fails to meet any of the requirements of § 18.2-340.24 of the Code of Virginia or fails to file a financial report as required by § 18.2-340.30 of the Code of Virginia or when a manufacturer fails to file a financial report as required by § 18.2-340.30:2 of the Code of Virginia, in lieu of suspending, revoking, or denying a permit to conduct charitable gaming; an authorization to operate and conduct electronic gaming; or a permit to distribute a distributed pull-tab system or electronic gaming devices, the department may afford an organization or manufacturer, at the department's discretion, an opportunity to enter into a compliance agreement specifying additional conditions or requirements as it may deem necessary to ensure an organization's or a manufacturer's compliance with the Charitable Gaming Law and regulations adopted pursuant thereto and may require that an organization or manufacturer participates in such training as is offered by the department.

E. If [the premises on which] a social [~~organization's premises of its primary location~~ organization operates and conducts electronic gaming] is deemed a common nuisance pursuant to § 18.2-258 of the Code of Virginia, then the department may suspend, revoke, or deny the social organization's authorization to operate and conduct electronic gaming.

F. If a permit or authorization to operate and conduct electronic gaming is suspended, the department shall set the terms of the suspension, which shall include the length of the

suspension and a requirement that, prior to reinstatement of the permit or authorization, the organization shall submit a remedial business plan to address the conditions that resulted in the suspension. The remedial business plan must be approved by the department prior to reinstatement of the permit or authorization.

G. An organization whose [permit or] authorization to operate and conduct electronic gaming is revoked shall be eligible to reapply for an authorization one year from the date of revocation. If the authorization was revoked [~~less~~ fewer] than 18 months prior to the organization reapplying for an authorization, the organization shall submit a remedial business plan [~~approved~~ for approval] by the department to address the conditions that resulted in the revocation. The remedial business plan must be approved by the department prior to reinstatement of the permit or authorization. The department at its discretion may issue the authorization if it is satisfied that the organization's remedial business plan will result in compliance with the requirements of the Charitable Gaming Law and regulations adopted pursuant thereto.

H. If [~~an~~ a permit or] authorization to operate and conduct electronic gaming is suspended, the department shall set the terms of the suspension, which shall include the length of the suspension and a requirement that prior to reinstatement of the authorization, the organization shall submit a remedial business plan approved by the department to address the conditions that resulted in the suspension. The remedial business plan must be approved by the department prior to reinstatement of the permit or authorization.

I. If an organization fails to meet the minimum use of proceeds requirement after having been suspended, the organization's authorization to operate and conduct electronic gaming shall be revoked. An organization whose authorization is revoked shall be eligible to reapply for an authorization at the end of one year from the date of revocation. If the authorization is revoked, the organization is required to reapply for an authorization, and if the authorization was revoked less than 18 months prior to reapplying for an authorization, then the organization shall submit a remedial business plan approved by the department to address the conditions that resulted in the revocation. The department at its discretion may issue the authorization if it is satisfied that the organization's remedial business plan will result in meeting the use of proceeds requirement.

Article 2
Conduct of Games, Rules of Play, Electronic Bingo

11VAC20-20-60. Conduct of bingo, paper instant bingo, paper pull-tabs, paper seal cards, event games, network bingo, electronic gaming, and raffles.

A. Organizations subject to this chapter shall post their charitable gaming permit or authorization to operate and conduct electronic gaming at all times on the premises where charitable gaming [~~or electronic gaming~~] is conducted.

B. No individual shall provide any information or engage in any conduct that alters or is intended to alter the outcome of any charitable game or electronic game.

C. Individuals younger than 18 years of age may play bingo provided such persons are accompanied by a parent or legal guardian. It shall be the responsibility of the organization to ensure that such individuals are eligible to play. An organization's house rules may further limit the play of bingo or purchase of raffle tickets by minors.

D. Individuals younger than 18 years of age may sell raffle tickets for a qualified organization raising funds for activities in which they are active participants.

E. No individual younger than 18 years of age may participate in the management or operation of bingo games. Individuals 14 through 17 years of age may participate in the conduct of a bingo game provided the organization permitted for charitable gaming obtains and keeps on file written parental consent from the parent or legal guardian and verifies the date of birth of the minor. An organization's house rules may further limit the involvement of minors in the conduct of bingo games. No individual younger than 21 years of age may participate in the management, operation, or conduct of electronic gaming.

F. No qualified organization shall sell any network bingo cards, paper instant bingo, paper pull-tab, or paper seal card to any individual younger than 18 years of age. No individual younger than 18 years of age shall play or redeem any network bingo cards, paper instant bingo, paper pull-tab, or paper seal card. No individual younger than 21 years of age shall play any electronic gaming device or electronic game or redeem anything from the play of such a device or game.

G. Unless otherwise prohibited by the Code of Virginia or this chapter, nonmembers who are under the direct supervision of a bona fide member may participate in the conduct of bingo or electronic gaming.

H. All game workers shall have in their possession a photo identification, such as a driver's license or other government-issued identification, and shall make the photo identification available for inspection upon request by a department agent while participating in the management, operation, or conduct of a bingo game or electronic gaming.

I. A game manager who is a bona fide member of the organization and is designated by the organization's management as the person responsible for the operation of the bingo game [~~or electronic gaming~~] during a particular session shall be present any time a bingo game [~~or electronic gaming~~] is conducted.

J. [A game manager who is a bona fide member of the qualified organization and is designated by the organization's management as a person responsible for the operation of the electronic games shall be present at the facility where the electronic gaming occurs any time electronic gaming is

available to the public. For electronic gaming conducted by the social organization for its members only, the game manager or responsible representative must be available by telephone at all times and must be physically present at the facility within 30 minutes of a request by the department. Failure to provide the department access to the facility may result in the revocation or suspension of the organization's electronic gaming authorization.

K.] Organizations shall ensure that all charitable gaming equipment, a distributed pull-tab system, and any electronic gaming device are in working order before charitable gaming activities commence.

[~~K.~~ L.] Each electronic gaming device must have a device tag affixed indicating that such device is authorized and approved by the department. All organizations shall notify the department of any new distributed pull-tab system or electronic gaming devices they purchase or lease.

[~~L.~~ M.] Any organization selling bingo, paper instant bingo, paper pull-tabs, paper seal cards, or network bingo supplies or conducting electronic gaming shall:

1. Maintain a supplier's, network bingo provider's, or manufacturer's invoice or a legible copy thereof at the location where the gaming is taking place and cards are sold. The original invoice or legible copy shall be stored in the same storage space as the gaming supplies. All gaming supplies shall be stored in a secure area that has access limited only to bona fide members of the organization; [~~and~~]

2. Pay for all charitable gaming supplies [~~and~~ except electronic gaming supplies~~, including the use of the electronic gaming device~~], only by a check drawn on the charitable gaming account of the organization [; and

3. Pay for all electronic gaming supplies, including the use of the electronic gaming device, by check or electronic fund transfer drawn from the charitable gaming account of the organization. Any electronic fund transfer shall be agreed to in writing between the qualified or social organization and the licensed manufacturer or supplier].

A complete inventory of all charitable gaming supplies shall be maintained by the organization on the premises where the gaming is being conducted.

[~~M.~~ N.] A bingo session game worker may receive complimentary food and nonalcoholic beverages provided on premises, as long as the retail value of such food and beverages does not exceed $15 for each session.

[~~N.~~ O.] Permitted organizations shall not commingle records, supplies, or funds from permitted activities with those from paper instant bingo, paper pull-tabs, paper seal cards, or electronic gaming sold in social quarters.

[~~O.~~ P.] Individuals who are not members of an organization or are members who do not participate in any charitable gaming activities may be paid reasonable fees for preparation of quarterly and annual financial reports.

[~~P.~~ Q.] Except as allowed pursuant to § 18.2-340.34:1 of the Code of Virginia, no free packs, free electronic bingo devices, free electronic pull-tabs, free network bingo cards, discounts, or remuneration in any other form shall be provided directly or indirectly to game workers, members of their family, or individuals residing in their household. The reduction of tuition, dues, or any fees or payments due as a result of a member or shareholder or anyone in their household working bingo games, electronic gaming, or raffles is prohibited.

[~~Q.~~ R.] Individuals providing security for an organization's charitable gaming activity shall not participate in the charitable gaming activity and shall not be compensated with charitable gaming supplies, free electronic pull-tabs, or network bingo cards or with rentals of electronic bingo devices or electronic gaming devices.

[~~R.~~ S.] No organization shall award any prize money or any merchandise valued in excess of the amounts specified by the Code of Virginia.

[~~S.~~ T.] Multiple sessions shall be permitted in a single premises as long as the sessions are distinct from one another and are not used to advertise or do not result in the awarding of more in prizes than is permitted for a single qualified organization. All leases for organizations to conduct charitable gaming or electronic gaming in a single premises shall ensure each session is separated by an interval of at least 30 minutes. Bingo sales for the subsequent session may take place during the 30-minute break once the building is cleared of all patrons and workers from the previous session. No other sales of charitable gaming supplies or electronic gaming may occur during the 30-minute break.

[~~T.~~ U.] All bingo and instant bingo, pull-tabs, seal card, or electronic gaming sales, play, and redemption must occur within the time specified on the charitable gaming permit or authorization to operate and conduct electronic gaming. Network bingo card sales must occur within the time specified on the charitable gaming permit.

[~~U.~~ V.] Paper instant bingo, paper pull-tabs, or paper seal cards shall only be sold in conjunction with a bingo session, except as authorized by § 18.2-340.26:1, 18.2-340.26:2, or 18.2-340.26:3 of the Code of Virginia. No paper instant bingo, paper pull-tab, or paper seal card sales shall take place more than two hours before the selection of the first ball for the first bingo game or more than two hours after the selection of the last ball for the last bingo game. If multiple sessions are held at the same location for either bingo or electronic gaming, no paper instant bingo, paper pull-tab, paper seal card, or electronic pull-tab sales shall be conducted during the required 30-minute break between sessions. The department may take

action if it believes that a bingo session is not legitimate or is being conducted in a manner such that paper instant bingo, paper pull-tabs, or paper seal cards are not being sold in conjunction with a bingo session.

[~~V.~~ W.] Only a game worker for a qualified organization may rent, exchange, or otherwise provide electronic bingo devices or electronic gaming devices to players.

[~~W.~~ X.] A qualified organization shall conduct only bingo games, network bingo, and raffles listed on a game program for that session. The program shall list all prize amounts. If the prize amounts are determined by attendance or at the end of a game, the game program shall list the attendance required for the prize amount or disclose that prizes shall be determined at the end of a game and the method for determining the prize amount. In such a case, the organization shall announce the prize amount at the end of the game. The percentage of the gross receipts from network bingo cards allocated to the prize pool shall be listed on the game program along with the maximum allowable prize amount for network bingo.

[~~X.~~ Y.] A qualified organization selling paper instant bingo, paper pull-tabs, or paper seal cards or conducting electronic gaming shall post a flare provided by the manufacturer at the location where such cards or electronic pull-tabs are sold. All such sales and prize payouts shall be in accordance with the flare for that deal.

[~~Y.~~ Z.] Only qualified organizations, facilities in which qualified organizations play bingo, network bingo providers, and suppliers permitted by the department shall advertise a bingo game. Providing players with information about network bingo or bingo games through printed advertising is permitted, provided the name of the qualified organization shall be in a type size equal to or larger than the name of the premises, the hall, or the word "bingo." Printed advertisements shall identify the use of proceeds percentage reported in the past quarter or fiscal year.

[~~Z.~~ AA.] Advertisements for electronic gaming are prohibited.

[~~AA.~~ BB.] Raffles that award prizes based on a percentage of gross receipts shall use prenumbered tickets.

[~~BB.~~ CC.] The following rules shall apply to mechanical dispensing devices used to dispense paper instant bingo, paper pull-tabs, or paper seal cards:

1. A mechanical dispensing device shall only be used at a location and time during which a qualified organization holds a permit to conduct charitable gaming. Only instant bingo, paper pull-tab, or paper seal cards purchased by an organization to be used during the organization's charitable gaming activity shall be in the mechanical dispensing device.

2. Keys to the dispensing area and coin box or cash box shall be in the possession and control of the game manager or designee of the organization's board of directors at all times. Keys shall at all times be available at the location where the mechanical dispensing device is being used.

3. The game manager or designee shall provide access to the mechanical dispensing device to the department, its employees, or its agents for inspection upon request.

4. Only a game worker of an organization may stock the mechanical dispensing device, remove cash, or pay winners' prizes.

[~~CC.~~ DD.] Organizations shall only acquire, lease, obtain, purchase, rent, or use charitable gaming supplies from a supplier; network bingo supplies from a network bingo provider; distributed pull-tab system or electronic gaming devices from a manufacturer or supplier who has a current permit issued by the department pursuant to § 18.2-340.34 of the Code of Virginia.

[~~DD.~~ EE.] An organization shall not tamper with bingo paper or any other charitable gaming supplies received from a supplier or distributed pull-tab system or electronic gaming devices received from a manufacturer or supplier.

[~~EE.~~ FF.] The total amount of all discounts given by any organization for bingo games during any fiscal year shall not exceed 1.0% of the organization's gross receipts.

[~~FF.~~ GG.] A social organization may place the same electronic gaming device in its social quarters that it places in the public space in its primary location when operating and conducting electronic gaming. A social organization shall notify the department and manufacturer prior to moving the device between its social quarters and the public space in its primary location and shall only move the device after the manufacturer ensures its system accurately reflects the qualified organization to which the electronic gaming sales must be attributed. The social organization shall ensure no cash is located in the device's bill acceptor prior to moving the device between its social quarters and the public space in its primary location.

11VAC20-20-70. Rules of play.

A. Each organization shall adopt "house rules" regarding conduct of the session. The "house rules" for the network bingo game shall be adopted by a mutual agreement among all of the organizations participating in a particular network bingo or by the network bingo provider. Such rules shall be consistent with the provisions of the Charitable Gaming Law and regulations adopted pursuant thereto. "House rules" shall be conspicuously posted or printed on the game program.

B. All players shall be physically present at the location where the bingo numbers for a bingo game are drawn to play the game or to claim a prize, except when the player, who has purchased a network bingo card, is participating in network bingo. Seal card prizes that can only be determined after a seal is removed or opened must be claimed within 30 days of the close of a

deal. All other prizes [, except prizes for electronic gaming,] must be claimed on the game date.

C. The following rules of play shall govern the sale of instant bingo, pull-tabs, and seal cards:

1. No cards that have been marked, defaced, altered, tampered with, or otherwise constructed in a manner that tends to deceive the public or affect the chances of winning or losing shall be placed into play.

2. Winning cards shall have the winning symbol or number defaced or punched immediately after redemption by the organization's authorized representative.

3. An organization may commingle unsold instant bingo cards and pull-tabs with no more than one additional deal. The practice of commingling deals shall be disclosed to the public via house rules or in a similar manner. Seal card deals shall not be commingled.

4. If a deal is not played to completion and unsold cards remain, the remaining cards shall be sold at the next session the same type of ticket is scheduled to be sold. If no future date is anticipated, the organization shall, after making diligent efforts to sell the entire deal, consider the deal closed or completed. The unsold cards shall be retained for a minimum of three years following the close of the fiscal year and shall not be opened.

5. All seal card games purchased shall contain the sign-up sheet, the seals, and the cards packaged together in each deal.

6. Progressive seal card prizes not claimed within 30 days shall be carried forward to the next progressive seal card game in progress and paid to the next progressive seal card game prize winner.

D. No one involved in the conduct of bingo may play bingo, play network bingo, or purchase network bingo cards at any session they have worked or intend to work. No one involved in the sale or redemption of any instant bingo, pull-tabs, seal cards, or electronic gaming may purchase directly or through others instant bingo, pull-tab, seal card, or electronic gaming products from organizations they assist on the day they have worked or from any deal they have helped sell or redeem, whichever occurs later.

E. Electronic bingo.

1. Electronic bingo devices may be used by bingo players in the following manner:

a. Players may input into the device each number called or the device may automatically daub each number as the number is called;

b. Players must notify the game operator or caller of a winning pattern of bingo by a means other than use of the electronic bingo device;

c. Players are limited to playing a maximum of 54 card faces per device per game;

d. Electronic bingo devices shall not be reserved for players. Each player shall have an equal opportunity to use the available electronic bingo devices on a first come, first served basis;

e. Each electronic bingo device shall produce a player receipt with the organization name, date, time, location, sequential transaction or receipt number, number of electronic bingo cards loaded, cost of electronic bingo cards loaded, and date and time of the transaction. Images of cards or faces stored in an electronic bingo device must be exact duplicates of the printed faces if faces are printed;

f. Department agents may examine and inspect any electronic bingo device and related system. Such examination and inspection shall include immediate access to the electronic bingo device and unlimited inspection of all parts and associated systems and may involve the removal of equipment from the game premises for further testing;

g. All electronic bingo devices must be loaded or enabled for play on the premises where the game will be played;

h. All electronic bingo devices shall be rented or otherwise provided to a player only by an organization and no part of the proceeds of the rental of such devices shall be paid to a landlord or the landlord's employee, agent, or member of the landlord's immediate family; and

i. If a player's call of a bingo is disputed by another player or if a department agent makes a request, one or more cards stored on an electronic bingo device shall be printed by the organization.

2. Players may exchange a defective electronic bingo device for another electronic bingo device provided a disinterested player verifies that the device is not functioning. A disinterested player shall also verify that no numbers called for the game in progress have been keyed into the replacement electronic bingo device prior to the exchange.

F. The following rules of play shall govern the conduct of raffles:

1. Before a prize drawing, each stub or other detachable section of each ticket sold shall be placed into a receptacle from which the winning tickets shall be drawn. The receptacle shall be designed so that each ticket placed in it has an equal chance to be drawn.

2. All prizes shall be valued at fair market value.

G. The following rules shall apply to decision bingo games:

1. Decision bingo shall be played on bingo cards in the conventional manner.

2. Players shall enter a game by paying a predetermined amount for each card face in play.

3. Players shall pay a predetermined fee for each set of three bingo numbers called for each card in play.

4. The prize amount shall be the total of all fees not to exceed the prize limit set forth for regular bingo in § 18.2-340.33 of the Code of Virginia. Any excess funds shall be retained by the organization.

5. The predetermined amounts in subdivisions 2 and 3 of this subsection shall be printed in the game program. The prize amount for a game shall be announced before the prize is paid to the winner.

H. The following rules shall apply to treasure chest games:

1. The organization shall list the treasure chest game on the bingo game program as a "Treasure Chest Raffle."

2. The organization shall have house rules posted that describe how the game is to be played.

3. The treasure chest participant shall only be selected through some other authorized charitable game at the same bingo session.

4. The organization shall account for all funds as treasure chest/raffle sales on the session reconciliation form.

5. If the player does not open the lock on the treasure chest, the game manager or the game manager's designee shall proceed to try every key until the correct key opens the treasure chest lock to show all players that one of the keys will open the lock.

I. The following rules shall apply to progressive bingo games:

1. Bingo paper sold for use in progressive bingo games shall conform to the standards set forth in 11VAC20-20-140.

2. Organizations shall not include in admission packs the bingo paper intended for use in progressive bingo games.

3. Any progressive bingo game, its prize, and the number of bingo numbers to be called shall be clearly announced before the progressive bingo game is played and shall be posted on the premises where the progressive bingo game is played during each session that a progressive bingo game is played.

4. Pricing for a progressive bingo game card or sheet shall be listed on the game program.

5. If the predetermined pattern is not covered within the predetermined number of bingo numbers to be called, then the number of bingo numbers called will increase by one number for each subsequent session the progressive bingo game is played.

6. If the predetermined pattern is not covered within the predetermined number of bingo numbers to be called for that progressive bingo game, then the game will continue as a regular bingo game until the predetermined pattern is covered and a regular bingo prize is awarded.

7. The prize for any progressive bingo game shall be in accordance with the provisions of subdivision 8 of § 18.2-340.33 of the Code of Virginia.

J. The following rules shall apply to WINGO:

1. WINGO shall be played only for the hearing-impaired players.

2. WINGO shall utilize a visual device such as an oversized deck of cards in place of balls selected from a blower.

3. A caller must be in an area visible to all players and shall randomly select cards or other visual devices one at a time and display them so that all players can see them.

4. The organization must have house rules for WINGO, and the rules shall identify how players indicate that they have won.

5. All financial reporting shall be consistent with reporting for a traditional bingo game.

K. The following rules of play shall apply to event games:

1. No instant bingo cards or pull-tabs that have been marked, defaced, altered, tampered with, or otherwise constructed in a manner that tends to deceive the public or affect the chances of winning or losing shall be placed into play.

2. Instant bingo cards and pull-tabs used in an event game shall not be offered for sale or sold at a purchase price other than the purchase price indicated on the flare for that particular deal.

3. The maximum prize amount for event games shall not exceed the amount set forth in subdivision 8 of § 18.2-340.33 of the Code of Virginia for instant bingo, pull-tab, or seal card.

4. A sign-up sheet is not required for event games in which the winners are determined using a seal card.

5. Organizations shall determine the winners of event games during the same bingo session in which the instant bingo cards or pull-tabs are sold.

6. An authorized representative of the organization shall deface or punch the winning instant bingo cards or winning pull-tabs immediately after redemption.

7. If unsold bingo cards or unsold pull-tabs remain, the unsold cards shall be retained for a minimum of three years following the close of the fiscal year and shall not be opened.

Article 3
Bank Accounts, Recordkeeping, Financial Reporting, Audits, Fees

11VAC20-20-80. Bank accounts.

A. A qualified organization shall maintain a charitable gaming bank account that is separate from any other bank account, and all gaming receipts, except receipts from electronic gaming, shall be deposited into the charitable gaming bank account.

B. Disbursements for expenses other than prizes and reimbursement of meal expenses shall be made by check directly from a charitable gaming bank account or a bank account authorized pursuant to subsection A of this section. However, expenses related to a network bingo game [or distributed pull tab system] may be disbursed through an electronic fund transfer to the network bingo provider [or the permitted manufacturer or supplier providing the distributed pull-tab system,] provided that such an arrangement is agreed upon by both [(i)] the qualified [or social] organization and [(ii)] the network bingo provider [or permitted manufacturer or supplier]. A written agreement specifying the terms of this arrangement shall be required prior to any electronic fund transfer occurring between the two parties.

C. All records related to the charitable gaming bank account or the other bank account, authorized pursuant to subsection A of this section, including monthly bank statements, canceled checks or facsimiles thereof, and reconciliations, shall be maintained for a minimum of three years following the close of a fiscal year.

D. All receipts from each session of bingo games, network bingo games, raffles, instant bingo, pull-tabs, [or] seal cards [~~, or electronic gaming~~] shall be deposited by the second business day following the session at which they were received. [All receipts from electronic gaming shall be deposited at least once every seven calendar days.]

E. Raffle proceeds unrelated to a session shall be deposited into the qualified organization's charitable gaming bank account or a bank account authorized pursuant to subsection A of this section no later than the end of the calendar week following the week during which the organization received the proceeds.

F. A social organization operating and conducting electronic gaming or a qualified organization renting a premises from a social organization for the purpose of electronic gaming shall maintain a separate bank account for all receipts [rebates, discounts, or refunds] from electronic gaming.

11VAC20-20-90. Recordkeeping.

A. In addition to the records required by § 18.2-340.30 D of the Code of Virginia, qualified organizations conducting a session of bingo [~~,~~ or] electronic gaming [~~, instant bingo, pull-tabs, seal cards, or raffle~~] shall maintain a system of records for a minimum of three years following the close of the fiscal year, unless otherwise specified, for each session on forms prescribed by the department or reasonable facsimiles of those forms approved by the department that include:

1. Charitable gaming supplies, including electronic gaming or network bingo supplies purchased and used;

2. A session reconciliation form [~~,~~ or] an instant bingo, pull-tab, or seal card reconciliation form [~~, and an electronic gaming reconciliation form~~] completed and signed within 48 hours of the end of the session by the game manager [. For electronic gaming, an electronic gaming reconciliation form completed and signed within 48 hours of the deposit of receipts in accordance with 11VAC20-20-80 D];

3. All discounts provided;

4. A reconciliation to account for cash received from floor workers for the sale of extra bingo sheets for any game or network bingo cards;

5. The summary report that electronic bingo systems are required to maintain pursuant to 11VAC20-20-140 D 11;

6. An admissions control system [~~for a session involving bingo and instant bingo, seal cards, and pull-tabs~~] that provides a cross-check on the number of players in attendance and admission sales. This may include a ticket control system, cash register, or any similar system [. The requirements of this subdivision shall not apply to the operation and conduct of electronic gaming];

7. All operating expenses, including rent, advertising, and security. Copies of invoices for all such expenses shall also be maintained;

8. Expected and actual receipts from games played on hard bingo cards and number of games played on hard bingo cards;

9. A record of the name and address of each winner for all seal cards; in addition, the winning ticket and seal card shall be maintained for a minimum of 90 days after the session;

10. A record of all door prizes awarded; and

11. For any prize or jackpot of a value that meets or exceeds the reporting requirements in the Internal Revenue Service's Publication 3079, the name and address of each individual to whom any such prize or jackpot is awarded and the amount of the award.

B. Qualified organizations conducting raffles unrelated to a session shall have a recordkeeping system to account for cash receipts, cash disbursements, raffle tickets purchased or sold, and prizes awarded. All records shall be maintained for a minimum of three years following the close of the fiscal year. The recordkeeping system shall include:

1. Invoices for the purchase of raffle tickets, which shall reflect the following information:

a. Name and address of supplier;

b. Name of purchaser;

c. Date of purchase;

d. Number of tickets printed;

e. Ticket number sequence for tickets printed; and

f. Sales price of individual ticket;

2. A record of cash receipts from raffle ticket sales by tracking the total number of tickets available for sale, the

number issued to sellers, the number returned, the number sold, and reconciliation of all raffle sales to receipts;

3. Serial numbers of tickets for raffle sales initiated and concluded at a bingo game or sequentially numbered tickets, which shall state the name, address, and telephone number of the organization, the prize to be awarded, the date of the prize drawing or selection, the selling price of the raffle ticket, and the charitable gaming permit number;

4. For any raffle prize of a value that meets or exceeds the reporting requirements in the Internal Revenue Service's Publication 3079, receipts on which prize winners must provide printed name, residence address, and the amount and description of the prize received; and

5. Deposit records of the required weekly deposits of raffle receipts.

C. All raffle tickets shall have a detachable section; be consecutively numbered with the detachable section having the same number; provide space for the purchaser's name, complete address, and telephone number; and state (i) the name and address of the organization; (ii) the prize to be awarded; (iii) the date, time, and location of the prize drawing; (iv) the selling price of the ticket; and (v) the charitable gaming permit number. Winning tickets and unsold tickets shall be maintained for a minimum of three years following the close of the fiscal year.

D. All unused charitable gaming supplies, including network bingo supplies, shall either be returned for refund to the original supplier in unopened original packaging in resalable condition as determined by the supplier or destroyed following notification to the department on a form prescribed by the department. The organization shall maintain a receipt for all such supplies returned to the supplier or destroyed.

11VAC20-20-100. Financial reporting, penalties, inspections, and audits.

A. Each holder of a charitable gaming permit or an authorization to operate and conduct electronic gaming shall file an annual report of receipts and disbursements by March 15 of each year on a form prescribed by the department. The annual report shall cover the activity for the fiscal year.

B. For all charitable gaming except electronic gaming, the annual report shall be accompanied by the audit and administration fee of 0.5% of the gross receipts and an additional fee of 0.25% for the fiscal year unless the fee has been remitted with quarterly reports, or the organization is exempt from payment of the fee pursuant to § 18.2-340.23 of the Code of Virginia.

C. For electronic gaming, the annual report shall be accompanied by the audit and administration fee of 0.5% of the adjusted gross receipts and an additional fee of 0.25% for the fiscal year unless the fee has been remitted with quarterly reports, remitted by the manufacturer pursuant to § 18.2-340.31 of the Code of Virginia. While the manufacturer may pay the audit and administration fee for the organization, it is the sole responsibility of the organization to ensure the fee is paid in full.

D. An organization desiring an extension to file its annual report for good cause shall, prior to the due date established in subsection A of this section, request the extension in writing on a form prescribed by the department and shall pay the projected audit and administration fee, unless remitted by the manufacturer pursuant to § 18.2-340.31 of the Code of Virginia or exempt from payment of the fee pursuant to § 18.2-340.23 of the Code of Virginia. The extension request and payment of projected fees shall be made in accordance with the provisions of § 18.2-340.30 of the Code of Virginia.

E. Unless exempted by § 18.2-340.23 of the Code of Virginia, qualified organizations realizing any gross gaming receipts in any calendar quarter shall file a quarterly report of receipts and disbursements on a form prescribed by the department as follows:

Quarter Ending	Date Due
March 31	June 1
June 30	September 1
September 30	December 1
December 31	March 1

Qualified organizations shall submit quarterly reports with the appropriate audit and administration fee, as established in subsections B and C of this section, for the quarter unless remitted by the manufacturer pursuant to § 18.2-340.31 of the Code of Virginia, or the organization is exempt from payment of the fee pursuant to § 18.2-340.23 of the Code of Virginia. An annual financial report may substitute for a quarterly report if the organization has no further charitable gaming income during the remainder of the reporting period and the annual report is filed by the due date for the applicable calendar quarter.

F. An organization desiring an extension to file its quarterly report for good cause shall, prior to the due date as specified pursuant to subsection D of this section, request the extension in writing on a form prescribed by the department and shall pay the projected audit and administration fee, unless remitted by the manufacturer pursuant to § 18.2-340.31 of the Code of Virginia or exempt from payment of the fee pursuant to § 18.2-340.23 of the Code of Virginia. The extension request and payment of projected fees shall be made in accordance with the provisions of § 18.2-340.30 of the Code of Virginia.

G. Organizations failing to file required reports, request an extension, or make fee payments when due shall be charged a penalty of $25 per day from the due date until such time as the required report is filed.

H. Any qualified organization in possession of funds derived from charitable gaming or electronic gaming, including those who have ceased operations, regardless of when such funds may have been received or whether it has a valid permit or authorization to operate and conduct electronic gaming from the department, shall file an annual financial report on a form prescribed by the department on or before March 15 of each year until such funds are depleted. If an organization ceases the operation and conduct of charitable gaming or electronic gaming, it shall provide the department with the name of an individual who shall be responsible for filing financial reports. If no such information is provided, the president of an organization shall be responsible for filing reports until all charitable gaming or electronic gaming proceeds are depleted.

I. If an organization has been identified through inspection, audit, or other means as having deficiencies in complying with the Charitable Gaming Law and regulations adopted pursuant thereto or having ineffective internal controls, the department may impose restrictions or additional recordkeeping and financial reporting requirements.

J. Any records deemed necessary to complete an inspection, audit, or investigation may be collected by the department, its employees, or its agents from the premises of an organization or any location where charitable gaming is conducted. The department shall provide a written receipt of such records at the time of collection.

K. [~~Salaries and wages of employees whose primary responsibility is to provide services for the principal benefit of an organization's members shall not qualify as a business expense.~~ An organization that meets the requirements of 11VAC20-20-20 D 2 may use electronic gaming revenue for salaries and wages of employees whose primary responsibility is to provide services for the principal benefit of an organization's members.]

11VAC20-20-110. Use of proceeds.

A. All payments by an organization intended as use of proceeds [, except for payments made from electronic gaming receipts,] must be made by check written from the organization's charitable gaming account or a bank account authorized pursuant to 11VAC20-20-80 A.

B. [All payments by an organization intended as use of proceeds that are made from electronic gaming receipts must be made by check or electronic funds transfer from the organization's charitable gaming account or a bank account authorized pursuant to 11VAC20-20-80 A.

C.] Use of proceeds payments may be made for scholarship funds or for religious, charitable, educational, or community purposes. In addition, an organization may obtain department approval to establish a special fund account or an irrevocable trust fund for special circumstances. Transfers to such an account or an irrevocable trust fund from the organization's charitable gaming account may be included as a use of proceeds if the payment is authorized by the organization's board of directors.

No payments made to such a special fund account shall be withdrawn for other than the specified purpose, unless prior notification is made to the department.

[~~C.~~ D.] Expenditures of charitable gaming funds for social or recreational activities or for events, activities, or programs that are open primarily to an organization's members and their families shall not qualify as use of proceeds unless substantial benefit to the community is demonstrated.

[~~D.~~ E.] Payments made to or on behalf of indigent, sick, or deceased members or their immediate families shall be allowed as use of proceeds provided they are approved by the organization's board of directors and the need is documented.

[~~E.~~ F.] Payments made directly for the benefit of an individual member, member of an individual member's family, or person residing in an individual member's household shall not be allowed as a use of proceeds unless authorized by the Charitable Gaming Law or regulations adopted pursuant thereto.

[~~F.~~ G.] Use of proceeds payments by an organization shall not be made for any activity that is not permitted by federal, state, or local laws or for any activity that attempts to influence or finance directly or indirectly political persons or committees or the election or reelection of any person who is or has been a candidate for public office.

[~~G.~~ H.] Organizations shall maintain details of all use of proceeds disbursements for a minimum of three years following the close of the fiscal year and shall make this information available to the department upon request.

[~~H.~~ I.] The department may disallow a use of proceeds payment to be counted against the minimum percentage referred to in 11VAC20-20-20 D. If any payment claimed as use of proceeds is subsequently disallowed, an organization may be allowed additional time as specified by the department to meet minimum use of proceeds requirements.

Article 4
Rent

11VAC20-20-120. Requirements regarding renting premises, agreements, and landlord participation.

A. No qualified organization shall lease, rent, or use any premises to operate or conduct charitable gaming unless all terms and conditions for lease, rental, or use are set forth in a written agreement and signed by the parties thereto prior to the issuance of a permit to operate and conduct charitable gaming or authorization to operate and conduct electronic gaming.

B. Organizations shall not make payments to a landlord or a landlord's agent or employee except by check drawn on the organization's charitable gaming account.

C. No landlord, landlord's agent or employee, member of a landlord's immediate family, or person residing in a landlord's household shall make, directly or indirectly, a loan to any of the organization's officers, directors, or game managers or to any organization involved in the management, operation, or conduct of charitable gaming or electronic gaming of an organization in Virginia that leases its charitable gaming premises from the landlord.

D. No landlord, landlord's agent or employee, member of a landlord's immediate family, or person residing in a landlord's household shall make any direct or indirect payment to any qualified organization or the organization's officers, directors, or game managers involved in the management, operation, or conduct of charitable gaming or electronic gaming conducted on a premise leased from the landlord in Virginia unless the payment is authorized by the lease agreement and is in accordance with the law.

E. No landlord, landlord's agent or employee, member of a landlord's immediate family, or person residing in a landlord's same household shall do any of the following at charitable games or electronic games operated and conducted on the landlord's premises:

1. Participate in the management, operation, or conduct of any charitable games or electronic games;

2. Sell, lease, or otherwise provide any charitable gaming supplies, including bingo cards, pull-tab cards, distributed pull-tab systems, electronic gaming devices, network bingo cards, or other game pieces; or

3. Require as a condition of the lease that a particular manufacturer, distributor, network bingo provider, or supplier of charitable gaming supplies or electronic gaming device is used by the organization.

"Charitable gaming supplies" as used in this chapter shall not include glue, markers, or tape sold from concession stands or from a location physically separated from the location where charitable gaming supplies are normally sold.

F. No member of an organization involved in the management, operation, or conduct of charitable gaming or electronic gaming shall provide any services to a landlord or a landlord's agents or employees or be remunerated in any manner by the landlord of the premises or such landlord's agents or employees where an organization is operating or conducting its charitable gaming or electronic gaming.

G. For the purpose of operating and conducting electronic gaming, a qualified organization shall only lease or rent the premises of a permitted and authorized social organization that is operating and conducting electronic gaming pursuant to §§ 18.2-340.25:1 and 18.2-340.26:3 of the Code of Virginia. All terms and conditions for leasing or renting of the premises shall be set forth in a written agreement and signed by the parties. No qualified organization shall operate and conduct electronic gaming until the written agreement is submitted to the department for review and the department issues a permit authorizing the qualified organization to conduct and operate electronic gaming.

H. The lease agreement between a social organization authorized to operate and conduct electronic gaming and a qualified organization that intends to lease or rent the social organization's public space in order to operate and conduct electronic gaming:

1. Shall not require the qualified organization to acquire, lease, obtain, purchase, rent, or use an electronic gaming device from a specific manufacturer;

2. Shall not provide for the employment or compensation of any member of the social organization for the purpose of organizing, managing, or conducting electronic gaming;

3. Shall establish a fixed rental or lease payment amount that reflects the fair market rental value, as defined in § 18.2-340.16 of the Code of Virginia. The fixed rental or lease payment amount shall not be based on a percentage of the qualified organization's electronic gaming receipts or the number of players at its electronic gaming session;

4. Shall not include a clause or condition that restricts the qualified organization from operating and conducting electronic gaming at the premises of another social organization; and

5. Shall not authorize the qualified organization to operate and conduct electronic gaming in the social organization's social quarters.

I. A social organization that is permitted and authorized to operate and conduct electronic gaming that leases its premises to a qualified organization so that the qualified organization may operate and conduct electronic gaming:

1. Shall not restrict a qualified organization's ability to conduct electronic gaming at the premise of another social organization;

2. Shall not lease or rent its social quarters to a qualified organization for the purpose of operating and conducting electronic gaming;

3. Shall not enter into any agreement that employs or otherwise compensates any person from the qualified organization to participate in the management, operation, or conduct of electronic gaming; and

4. Shall only lease or rent its premises by means of a fixed rental or lease payment amount that is established in the written agreement and reflects the fair market rental value, as defined in § 18.2-340.16 of the Code of Virginia. The fixed rental or lease payment amount shall not be based on a percentage of the qualified organization's receipts from electronic gaming or the number of players at its electronic gaming session.

Part III
Suppliers

11VAC20-20-130. Suppliers of charitable gaming supplies: application, qualifications, suspension, revocation, or refusal to renew permit.

A. Prior to providing any charitable gaming supplies, a supplier shall submit an application on a form prescribed by the department and receive a permit. A $1,000 application fee payable to the Treasurer of Virginia is required. In addition, a supplier must be authorized to conduct business in the Commonwealth of Virginia, which may include registration with the State Corporation Commission, the Department of Taxation, and the Virginia Employment Commission. The actual cost of background investigations for a permit may be billed by the department to an applicant.

B. The department may refuse to issue a permit or may suspend or revoke a permit if an officer, director, employee, agent, or owner:

1. Is operating without a valid license, permit, or certificate as a supplier, network bingo provider, or manufacturer in any state in the United States;

2. Fails or refuses to recall a product as directed by the department;

3. Conducts business with unauthorized entities or is not authorized to conduct business in the Commonwealth of Virginia;

4. Has been convicted of or pleaded nolo contendere to any crime as specified by § 18.2-340.34 B of the Code of Virginia; has had any license, permit, certificate, or other authority related to activities defined as charitable gaming in the Commonwealth suspended or revoked in the Commonwealth or in any other jurisdiction; has failed to file or has been delinquent in excess of one year in the filing of any tax returns or the payment of any taxes due the Commonwealth; or has failed to establish a registered office or registered agent in the Commonwealth if so required by § 13.1-634 or 13.1-763 of the Code of Virginia. As this provision relates to employees or agents, it shall only apply to individuals involved in sales to or solicitations of customers in the Commonwealth of Virginia;

5. Fails to notify the department within 20 days of the occurrence, knowledge, or receipt of the filing of any administrative or legal action relating to charitable gaming or the distribution of charitable gaming supplies involving or concerning the supplier, any officer or director, employee, agent, or owner during the term of its permit;

6. Fails to provide to the department upon request a current Letter for Company Registration on file with the U.S. Department of Justice if required in accordance with the Gambling Devices Act of 1962 (15 USC §§ 1171 through 1178) for any device that it sells, distributes, services, or maintains in the Commonwealth of Virginia; or

7. Has been engaged in conduct that would compromise the department's objective of maintaining the highest level of integrity in charitable gaming.

C. A supplier shall not sell, offer to sell, or otherwise provide charitable gaming supplies, distributed pull-tab systems, or electronic gaming devices for use by anyone in the Commonwealth of Virginia other than to an organization with a permit from the department or another permitted supplier. However, a supplier may:

1. Sell bingo cards and paper to persons or entities other than qualified organizations provided such supplies shall not be sold or otherwise provided for use in charitable gaming activities regulated by the department or in unlawful gambling activities. For each such sale, the supplier shall maintain the name, address, and telephone number of the purchaser. The supplier shall also obtain a written statement from the purchaser verifying that such supplies will not be used in charitable gaming or any unlawful gambling activity. Such a statement shall be dated and kept on file for a minimum of three years from the close of a fiscal year. Payment for such sales in excess of $50 shall be accepted in the form of a check.

2. Sell pull-tabs, seal cards, and electronic pull-tabs to organizations for use only upon the premises owned or exclusively leased by the organization and at such times as the portion of the premises in which the pull-tabs, seal cards, or electronic pull-tabs are sold is open only to members and their guests as authorized by § 18.2-340.26:1 of the Code of Virginia. Each such sale shall be accounted for separately and the accompanying invoice shall be clearly marked: "For Use in Social Quarters Only."

3. All such sales shall be documented pursuant to subsection G of this section and reported to the department pursuant to subsection I of this section. This provision shall not apply to the sale to landlords of equipment and video systems as defined in this chapter.

D. A supplier shall not sell, offer to sell, or otherwise provide charitable gaming supplies to any individual or organization in the Commonwealth of Virginia unless the charitable gaming supplies are purchased or obtained from a manufacturer or another permitted supplier. Suppliers may take back for credit and resell supplies received from an organization with a permit that has ceased charitable gaming or is returning supplies not needed.

E. No supplier, supplier's agent, or supplier's employee may be involved in the management, operation, or conduct of charitable gaming in the Commonwealth of Virginia. No member of a supplier's immediate family or person residing in the same household as a supplier may be involved in the management, operation, or conduct of charitable gaming of

any customer of the supplier in the Commonwealth of Virginia. No supplier, supplier's agent, or supplier's employee may participate in any charitable gaming of any customer of the supplier in the Commonwealth of Virginia. For the purposes of this regulation, servicing of electronic bingo devices or electronic gaming devices shall not be considered conduct or participation.

F. The department shall conduct a background investigation prior to the issuance of a permit to any supplier. The investigation may include the following:

1. A search of criminal history on all officers, directors, and owners; and

2. Verification of current compliance with Commonwealth of Virginia tax laws.

If the officers, directors, or owners are domiciled outside of the Commonwealth of Virginia or have resided in the Commonwealth of Virginia for fewer than five years, a criminal history search conducted by the appropriate authority in any state in which the officers, directors, or owners have resided during the previous five years shall be provided by the applicant.

G. Appropriate information and authorizations shall be provided to the department to verify information cited in subsection E of this section.

H. Suppliers shall document each sale or rental of charitable gaming supplies to an organization in the Commonwealth of Virginia on an invoice, which reflects the following:

1. Name, address, and organization number of the organization;

2. Date of sale or rental and location where charitable gaming supplies are shipped if different from the billing address;

3. Name, form number, and serial number of each deal of instant bingo, pull-tabs, seal cards, [~~electronic gaming,~~] or bundles and the quantity of cards in each deal;

4. Quantity of deals sold, the cost per deal, the selling price per card, the cash take-in per deal, and the cash payout per deal;

5. Serial number of the top sheet in each pack of disposable bingo paper, the quantity of sheets in each pack or pad, the cut and color, and the quantity of packs or pads sold;

6. Serial number for each series of uncollated bingo paper and the number of sheets sold;

7. Detailed information concerning the type, quantity, and individual price of any other charitable gaming supplies or related items, including concealed face bingo cards, hard cards, markers or daubers and refills, or any other merchandise. For concealed face bingo cards, the quantity of sets, price per set, and the serial number of each set shall be included;

8. Serial number of each electronic gaming device, a description of the physical attributes of the electronic gaming device, the quantity of electronic gaming devices sold or rented, and the physical address to which each electronic gaming device is shipped or delivered;

9. Serial number and description of any other equipment sold or rented that is used to facilitate the distribution, play, and redemption of electronic gaming and the physical address to which the equipment is shipped or delivered; [~~and~~]

10. Any type of equipment, device, or product manufactured for or intended to be used in the conduct of charitable games, including designators, designator receptacles, number display boards, selection devices, dispensing machines, and verification devices [; and

11. For electronic gaming, the gross receipts or ticket sales, prizes paid out, electronic gaming adjusted gross receipts, cost of the use of the distributed pull-tab system, rebates, discounts, refunds, and any other information deemed necessary by the department].

I. Suppliers shall ensure that two copies of the detailed invoice are provided to the customer for each sale of charitable gaming supplies.

J. Each supplier shall provide a report to the department by March 1 of each year on sales of charitable gaming supplies for the fiscal year ending December 31 of the previous year to each organization in the Commonwealth of Virginia. This report shall be provided to the department via a department-approved electronic medium. The report shall include the name, address, and organization number of each organization and the following information for each sale or transaction:

1. Bingo paper sales, including purchase price, description of paper to include quantity of sheets in pack and quantity of faces on sheet, and quantity of single sheets or packs shipped;

2. Deals of instant bingo, pull-tabs, seal cards, electronic pull-tabs, or any other raffle sales, including purchase price, deal name, deal form number, quantity of tickets in deal, ticket price, cash take-in per deal, cash payout per deal, and quantity of deals;

3. Electronic bingo device sales, including purchase or rental price and quantity of units;

4. Equipment used to facilitate the distribution, play, and redemption of electronic gaming, including purchase or rental price, description of equipment, quantity of units of each type of equipment, and the physical address to which the equipment is shipped or delivered; and

5. Sales of miscellaneous items such as daubers, markers, and other merchandise, including purchase price, description of product, and quantity of units.

K. The department shall set manufacturing and testing criteria for all electronic bingo devices and other equipment used in the conduct of charitable gaming. An electronic bingo device shall not be sold, leased, or otherwise furnished to any person in the Commonwealth of Virginia for use in the conduct of charitable gaming until an identical sample device containing identical proprietary software has been certified by a testing facility that has been formally recognized by the department as a testing facility that upholds the standards of integrity established by the department. The testing facility must certify that the device conforms, at a minimum, to the restrictions and conditions set forth in this chapter. Once the testing facility reports the test results to the department, the department will either approve or disapprove the submission and inform the manufacturer of the results. If any such equipment does not meet the department's criteria, it shall be recalled and shall not be distributed in the Commonwealth of Virginia. The cost of testing shall be borne by the manufacturer of such equipment.

L. Department employees shall have the right to inspect all electronic and mechanical equipment used in the conduct of charitable gaming.

M. Suppliers, supplier's agents and employees, members of the supplier's immediate family, or persons residing in a supplier's household shall not make any loan directly or indirectly to any organization or officer, director, game manager, or entity involved in the management, operation, or conduct of charitable gaming of a supplier's customer located in the Commonwealth of Virginia.

N. No supplier, supplier's agent, or supplier's employee shall directly or indirectly provide a rebate, discount, or refund to any person other than an organization that purchases supplies or leases or purchases equipment from the supplier. All such transactions shall be recorded on the supplier's account books [and invoices provided to the organization].

O. A supplier shall not rent, sell, or otherwise provide electronic bingo devices or equipment used to distribute, play, or redeem electronic games unless the supplier possesses a valid permit in the Commonwealth of Virginia.

P. A written agreement specifying the terms of lease or rental shall be required for any electronic bingo devices or equipment used to distribute, play, or redeem electronic games provided to an organization.

11VAC20-20-140. Construction and other standards for bingo, instant bingo, pull-tabs, seal cards, raffles, electronic bingo devices, and dispensing devices.

A. No supplier shall knowingly sell or otherwise provide to an organization and no organization shall knowingly use charitable gaming supplies unless they conform to the following construction standards:

1. Disposable paper sold shall be of sufficient weight and quality to allow for clearly readable numbers and to prevent ink from spreading, bleeding, or otherwise obscuring other numbers or cards.

2. Each sheet of disposable bingo paper shall be composed of cards bearing a serial number. No serial number shall be repeated on or in the same style, series, and color of cards within a three-year period.

3. Disposable bingo paper assembled in books or packs shall not be separated except for single-sheet specials. This provision does not apply to two-part cards on which numbers are filled by players and one part is separated and provided to an organization for verification purposes.

4. Each unit of disposable bingo paper shall have an exterior label listing the following information:

a. Description of product;

b. Number of packs or loose sheets;

c. Series numbers;

d. Serial number of the top sheet;

e. Number of cases;

f. Cut of paper; and

g. Color of paper.

5. "Lucky Seven" bingo cards or electronic facsimiles thereof shall have a single face where seven numbers shall be chosen. "Lucky Seven" sheets or electronic facsimiles thereof shall have multiple faces where seven numbers shall be chosen per face.

6. Disposable bingo paper shall have a number generally printed in the center space of a bingo card that identifies the unique pattern of numbers printed on that card. This number is commonly referred to as a free space number, perm number, center number, card number, or face number.

B. No supplier shall knowingly sell or otherwise provide to an organization and no organization shall knowingly use instant bingo, pull-tab, or seal cards unless they conform to the following construction standards:

1. Cards shall be constructed so that concealed numbers, symbols, or winner protection features cannot be viewed or determined from the outside of the card by using a high intensity lamp of 500 watts, with or without utilizing a focusing lens.

2. Deals shall be designed, constructed, glued, and assembled in a manner to prevent determination of a winning or losing ticket without removing the tabs or otherwise uncovering the symbols or numbers as intended.

3. Each card in a deal shall bear the same serial number. Only one serial number shall be used in a deal. No serial number used in a deal shall be repeated by the same manufacturer on that same manufacturer's form within a three-year period. The flare of each deal shall accompany the deal and shall have affixed to it the same serial number as the tickets in such deal.

4. Numbers or symbols on cards shall be fully visible in the window and shall be placed so that no part of a number or symbol remains covered when the tab is removed.

5. Cards shall be glued on all edges and around each window. Glue shall be of sufficient strength and type to prevent the undetectable separation or delamination of the card. For banded tickets, the glue must be of sufficient strength and quality to prevent the separation of the band from the ticket.

6. The following minimum information shall be printed on a card:

a. Break open pull-tab and instant bingo cards:

(1) Name of the manufacturer or its distinctive logo;

(2) Name of the game;

(3) Manufacturer's form number;

(4) Price per individual card or bundle;

(5) Unique minimum five-digit game serial number printed on the game information side of the card; and

(6) Number of winners and respective winning number or symbols and specific prize amounts unless accompanied by a manufacturer's preprinted publicly posted flare with that information.

b. Banded pull-tabs:

(1) Manufacturer;

(2) Serial number;

(3) Price per individual card or bundle unless accompanied by a manufacturer's preprinted publicly posted flare with that information; and

(4) Number of winners and respective winning numbers or symbols and prize amounts or a manufacturer's preprinted publicly posted flare giving that information.

7. All seal card games sold to organizations shall contain the sign-up sheet, seals, and cards packaged together in each deal.

C. Raffle tickets used independent of a session must conform to the following construction standards:

1. Each ticket shall have a detachable section and shall be consecutively numbered.

2. Each section of a ticket shall bear the same number. The section retained by the organization shall provide space for the purchaser's name, complete address, and telephone number.

3. The following information shall be printed on the purchaser's section of each ticket:

a. Dates and times of drawings;

b. Locations of the drawings;

c. Name of the charitable organization conducting the raffle;

d. Price of the ticket;

e. Charitable gaming permit number; and

f. Prizes.

Exceptions to these construction standards are allowed only with prior written approval from the department.

D. Electronic bingo.

1. The department, at its discretion, may require additional testing of electronic bingo devices at any time. Such additional testing shall be at the manufacturer's expense and shall be a condition of the continued use of such device.

2. All electronic bingo devices shall use proprietary software and hardware or commonly available software and hardware and shall be enabled for play on the premises where the game is to be played.

3. Each electronic bingo device shall have a unique identification number securely encoded into the software of the device. The unique identification number shall not be alterable by anyone other than the manufacturer of the electronic bingo device. Manufacturers of electronic bingo devices shall employ sufficient security safeguards in designing and manufacturing the devices such that it may be verified that all proprietary software components are authentic copies of the approved software components and all functioning components of the device are operating with identical copies of approved software programs. The electronic bingo device must also have sufficient security safeguards so that any restrictions or requirements authorized by the department or any approved proprietary software are protected from alteration by unauthorized personnel. The electronic bingo device shall not contain hard-coded or unchangeable passwords. Security measures that may be employed to comply with these provisions include the use of dongles, digital signature comparison hardware and software, secure boot loaders, encryption, and key and callback password systems.

4. A firewall or equivalent hardware device configured to block all inbound and outbound traffic that has not been expressly permitted and is not required for the continued use of the electronic bingo system must exist between the electronic bingo system and any external point of access.

5. Electronic bingo devices shall not allow a player to create a card by the input of specific numbers on each card. Manufacturers shall ensure that an electronic bingo device

does not allow for the play of any bingo card faces other than those verifiably purchased by the patron.

6. Electronic bingo devices shall not accept cash, currency, or tokens for play.

7. Electronic bingo devices shall require the manual entry of numbers as they are called, the manual verification of numbers as they have been electronically transmitted to the device, or the full automatic daubing of numbers as each number is called. During the play of a bingo game, the transmission of data to electronic bingo devices shall be limited to one-way communication to the electronic bingo device and shall consist only of publicly available information regarding the current game.

8. A device shall not allow the play of more than 54 cards per device per game.

9. The electronic bingo device system shall record a sequential transaction number or audit tracking number for each transaction. The system shall not allow the manual resetting or changing of this number.

10. The system shall produce a receipt for each electronic bingo device rented or otherwise provided containing the following:

a. Organization name;

b. Location of bingo game;

c. Date and time of the transaction;

d. Sequential transaction or receipt number;

e. Description of each electronic bingo product loaded. The description must include the quantity of bingo card faces that appear on each electronic bingo product (i.e., 9 Jackpot) and the sales price of each electronic bingo product;

f. Quantity of each electronic bingo product loaded; and

g. Total sales price of the transaction.

11. The system shall maintain and make available on demand a summary report for each session that includes the following:

a. Organization name;

b. Location of bingo game;

c. Date and time of each transaction;

d. Sequential transaction or receipt number of each transaction;

e. Description of each electronic bingo product loaded each session. The description must include the quantity of bingo card faces that appear on each electronic bingo product and the sales price of each electronic bingo product;

f. Quantity of each electronic bingo product loaded;

g. Total sales price of each electronic bingo product loaded;

h. Total sales price for each transaction;

i. A transaction history correlating the sequential transaction number of each electronic bingo device sale to the unique identification number of the electronic bingo device on which the sale was played;

j. Sufficient information to identify voids and returns, including the date and time of each voided transaction and return, the sequential transaction number, and the cost of voided transactions and returns; and

k. Total gross receipts for each session.

12. Each electronic bingo device shall be programmed to automatically erase all stored electronic bingo cards at the end of the last game of a session, within a set time from their rental to a player, or by some other clearance method approved by the department.

13. All electronic bingo devices shall be reloaded with another set of electronic bingo cards at the beginning of each session if the devices are to be reused at the same location.

E. In instances where a defect in packaging or in the construction of deals or electronic bingo devices is discovered by or reported to the department, the department shall notify the manufacturer of the deals or electronic bingo devices containing the alleged defect. Should the department, in consultation with the manufacturer, determine that a defect exists and should the department determine that the defect affects game security or otherwise threatens public confidence in the game, the department may, with respect to deals or electronic bingo devices for use still located within the Commonwealth of Virginia, require the supplier to:

1. Recall the deals or electronic bingo devices affected that have not been sold or otherwise provided; or

2. Issue a total recall of all affected deals or electronic bingo devices.

F. No supplier shall knowingly sell or otherwise provide to an organization and no organization shall knowingly use an instant bingo, pull-tab, or seal card dispenser unless the dispenser conforms to the following standards:

1. Each dispenser shall be manufactured in a manner that ensures a pull-tab ticket is dispensed only after insertion of United States currency or coinage into the dispenser. Such tickets and any change due shall be the only items dispensed from the machine.

2. Each dispenser shall be manufactured in a manner that ensures the dispenser neither displays nor has the capability of displaying or otherwise identifying an instant bingo, pull-tab, or seal card winning or nonwinning ticket.

3. Each dispenser shall be manufactured in such a manner that any visual animation does not simulate or display rolling or spinning reels or produce audible music or enhanced sound effects.

4. Each dispenser shall be equipped with separate locks for the instant bingo, pull-tab, or seal card supply modules and money boxes. Locks shall be configured so that no one key will operate both the supply modules and money boxes.

G. The department may require testing of a dispensing device at any time to ensure that it meets construction standards and allows for fair play. Such tests shall be conducted at the cost of the manufacturer of such dispensing devices.

H. The face value of the instant bingo, pull-tab, or seal cards being dispensed shall match the amount deposited in the currency acceptor or coin acceptor less change provided.

I. A dispensing device shall only dispense instant bingo, pull-tab, or seal cards that conform to the construction standards established in subsection B of this section and the randomization standards established in 11VAC20-20-150.

J. Suppliers and manufacturers of instant bingo, pull-tab, or seal card dispensers shall comply with the requirements of the Gambling Devices Act of 1962 (15 USC §§ 1171 through 1178).

11VAC20-20-150. Instant bingo, pull-tabs, or seal card randomization standards.

All instant bingo, pull-tabs, or seal cards shall meet the following randomization standards:

1. Deals shall be assembled so that winning tickets are placed throughout each deal.

2. Deals shall be assembled and packaged in a manner that prevents isolation of winning cards due to variations in printing, graphics, colors, sizes, appearances of cut edges, or other markings of cards.

3. Winning cards shall be distributed and mixed among all other cards in a deal so as to eliminate any pattern between deals or portions of deals from which the location or approximate location of any winning card may be determined.

11VAC20-20-160. Electronic random number generator standards.

A. Electronic random number generators shall not be sold, leased, or otherwise furnished to an organization for use in the conduct of bingo until an identical sample device containing identical proprietary software has been certified by a testing facility that has been formally recognized by the department as a testing facility that upholds the standards of integrity established by the department. The cost of testing shall be borne by the manufacturer of such equipment.

B. An electronic random number generator used in the conduct of bingo shall produce output that is statistically random.

1. Numbers produced by an electronic random number generator used in the conduct of bingo shall be statistically random individually and in the permutations and combinations used in the application under the rules of the game.

2. Numbers produced by an electronic random number generator used in the conduct of bingo shall pass the statistical tests for randomness to a 99% confidence level. Statistical tests for randomness may include:

a. Chi-square test;

b. Equi-distribution (frequency) test;

c. Gap test;

d. Poker test;

e. Coupon collector's test;

f. Permutation test;

g. Run test (patterns of occurrences shall not be recurrent);

h. Spectral test;

i. Serial correlation test potency and degree of serial correlation (outcomes shall be independent from the previous game); and

j. Test on subsequences.

C. An electronic random number generator used in the conduct of bingo shall produce output that is unpredictable.

1. It shall not be feasible to predict future outputs of a random number generator even if the algorithm and the past sequence of outputs are known.

2. Unpredictability shall be ensured by reseeding or by continuously cycling the random number generator and by a sufficient number or random number generator states for the applications supported.

3. Reseeding may be used where the reseeding input is at least as statistically random as and independent of the output of the random number generator being reseeded.

D. An electronic random number generator used in the conduct of bingo shall produce output that is nonrepeating. A random number generator shall not be initialized to reproduce the same output stream that it has produced before nor shall any two instances of a random number generator produce the same stream as each other.

E. Software that calls an electronic random number generator used in the conduct of bingo to derive game outcome events shall immediately use the output returned in accordance with the game rules.

F. The outputs of an electronic random number generator used in the conduct of bingo shall not be arbitrarily discarded or selected.

G. Where a sequence of outputs is required, the whole of the sequence in the order generated shall be used in accordance with the game rules.

H. An electronic random number generator used in the conduct of bingo that provides output scaled to given ranges shall:

1. Be independent and uniform over the range;

2. Provide numbers scaled to the ranges required by game rules and, notwithstanding the requirements of subdivision 3 of this subsection, may discard numbers that do not map uniformly onto the required range but shall use the first number in sequence that does map correctly to the range; and

3. Be capable of producing every possible outcome of a game according to its rules and use an unbiased algorithm. A scaling algorithm is considered to be unbiased if the measured bias is no greater than one in 100 million.

I. An electronic random number generator that an organization is using to conduct bingo prior to November 7, 2012, is not required to be certified.

Part IV
Electronic Distributed Pull-Tab Systems

Article 1
Electronic Gaming Manufacturers

11VAC20-20-170. Manufacturers of electronic gaming devices: application, qualifications, suspension, revocation, or refusal to renew permit.

A. As used in this section, "manufacturer" means an "electronic gaming manufacturer" as defined in § 18.2-340.16 of the Code of Virginia.

B. Prior to providing any electronic gaming device or distributed pull-tab system, a manufacturer shall submit an application on a form prescribed by the department and receive a permit. A $1,000 application fee payable to the Treasurer of Virginia is required. In addition, a manufacturer must be authorized to conduct business in the Commonwealth of Virginia, which may include registration with the State Corporation Commission, the Department of Taxation, and the Virginia Employment Commission. The actual cost of background investigations for a permit may be billed by the department to an applicant.

C. The department may refuse to issue a permit or may suspend or revoke a permit if an officer, director, employee, agent, or owner:

1. Is operating without a valid license, permit, or certificate as a supplier, network bingo provider, or manufacturer in any state in the United States;

2. Fails or refuses to recall a product as directed by the department;

3. Conducts business with unauthorized entities or is not authorized to conduct business in the Commonwealth of Virginia;

4. Has been convicted of or pleaded nolo contendere to any crime as specified by § 18.2-340.34 B of the Code of Virginia; has had any license, permit, certificate, or other authority related to activities defined as charitable gaming in the Commonwealth suspended or revoked in the Commonwealth or in any other jurisdiction; has failed to file or has been delinquent in excess of one year in the filing of any tax returns or the payment of any taxes due the Commonwealth; or has failed to establish a registered office or registered agent in the Commonwealth if so required by § 13.1-634 or 13.1-763 of the Code of Virginia. As this provision relates to employees or agents, it shall only apply to individuals involved in sales to or solicitations of customers in the Commonwealth of Virginia;

5. Fails to notify the department within 20 days of the occurrence, knowledge, or receipt of the filing of any administrative or legal action relating to charitable gaming or the distribution of a distributed pull-tab system involving or concerning the manufacturer, any officers or directors, employees, agent, or owner during the term of its permit;

6. Fails to provide to the department upon request a current Letter for Company Registration on file with the U.S. Department of Justice if required in accordance with the Gambling Devices Act of 1962 (15 USC §§ 1171 through 1178) for any device that it distributes in the Commonwealth of Virginia;

7. Has been engaged in conduct that would compromise the department's objective of maintaining the highest level of integrity in charitable gaming; or

8. Violates any provision of the Charitable Gaming Law or regulation adopted pursuant thereto.

D. Before denying, suspending, or revoking a manufacturer's permit, the department shall give the manufacturer a statement documenting the grounds for such action and an opportunity for a hearing as outlined in Part VI (11VAC20-20-600 et seq.) of this chapter.

E. A manufacturer shall not distribute a distributed pull-tab system for use by anyone in the Commonwealth of Virginia other than to an authorized social organization, qualified organization operating and conducting electronic gaming in accordance with the Charitable Gaming Law and regulations established thereto or a permitted supplier.

All such distributions shall be documented pursuant to subsection I of this section and reported to the department pursuant to subsection K of this section.

F. No manufacturer of a distributed pull-tab system, the manufacturer's agent, or the manufacturer's employee shall be involved in the management, operation, or conduct of charitable gaming in the Commonwealth of Virginia. No member of a manufacturer's immediate family or person residing in the same household as a manufacturer may be

involved in the management, operation, or conduct of charitable gaming of any customer of the manufacturer in the Commonwealth of Virginia. No manufacturer of a distributed pull-tab system, the manufacturer's agent, or the manufacturer's employee may participate in any charitable gaming of any customer of the manufacturer in the Commonwealth of Virginia. For the purposes of this chapter, servicing a distributed pull-tab system shall not be considered conduct or participation.

G. The department shall conduct a background investigation prior to the issuance of a permit to any manufacturer. The investigation may include the following:

1. A search of criminal history records on all officers, directors, and owners;

2. Verification of current compliance with Commonwealth of Virginia tax laws; and

3. Verification of current compliance with Virginia gaming laws or the gaming laws of any other state.

If the officers, directors, or owners are domiciled outside of the Commonwealth of Virginia or have resided in the Commonwealth of Virginia for fewer than five years, a criminal history search conducted by the appropriate authority in any state in which the officers, directors, or owners have resided during the previous five years shall be provided by the applicant.

H. Appropriate information and authorizations shall be provided to the department to verify information cited in subsection F of this section.

I. Manufacturers shall document each distribution of a distributed pull-tab system to any person for use in the Commonwealth of Virginia on an invoice that reflects the following:

1. Name, address, and organization number of the organization or supplier;

2. Date of sale or rental and location where the distributed pull-tab system is shipped or delivered if different from the billing address;

3. Name, form number, and serial number of each deal of electronic gaming;

4. Quantity of deals sold, the cost per deal, the selling price per card, the cash take-in per deal, and the cash payout per deal;

5. Serial number of each electronic gaming device, a description of the physical attributes of the electronic gaming device, the quantity of electronic gaming devices sold or rented, and the physical address to which each electronic gaming device is shipped or delivered; [~~and~~]

6. Serial number and description of any other equipment sold or rented that is used to facilitate the distribution, play, and redemption of electronic gaming and the physical address to which the equipment is shipped or delivered [; and

7. For electronic gaming, the gross receipts or ticket sales, prizes paid out, electronic gaming adjusted gross receipts, cost of the use of the distributed pull-tab system, rebates, discounts, refunds, and any other information deemed necessary by the department].

J. Manufacturers shall ensure that two copies of the detailed invoice are provided to the customer for each distribution of a distributed pull-tab system.

K. Each manufacturer shall provide a report to the department by March 1 of each year on the distribution of a distributed pull-tab system for the fiscal year ending December 31 of the previous year to each organization and permitted supplier in the Commonwealth of Virginia. This report shall be provided to the department via a department-approved electronic medium. The report shall include the name, address, and organization number of each organization and permitted supplier and the following information for each sale or transaction:

1. Deals of electronic games, including purchase price, deal name, deal form number, quantity of electronic gaming in deal, electronic pull-tab price, cash take-in per deal, cash payout per deal, and quantity of deals;

2. Equipment used to facilitate the distribution, play, and redemption of electronic games, including purchase or rental price, description of equipment, quantity of units of each type of equipment, and the physical address to which the equipment is shipped or delivered; and

3. Complete record of all electronic gaming adjusted gross receipts, itemized by organization.

L. A manufacturer that fails to file the annual sales report in accordance with subsection J of this section shall be subject to a penalty of $25 per day for each day following the report's due date until such time as the report is filed.

M. A manufacturer, a manufacturer's agents and employees, members of a manufacturer's immediate family, or persons residing in a manufacturer's household shall not make any loan directly or indirectly to any organization or officer, director, game manager, or entity involved in the management, operation, or conduct of charitable gaming of the manufacturer's customer located in the Commonwealth of Virginia.

N. A manufacturer, a manufacturer's agent, or a manufacturer's employee shall not directly or indirectly provide a rebate, discount, or refund to any person other than an organization that purchases, rents, or leases a distributed pull-tab system from the manufacturer. All such transactions shall be recorded on the manufacturer's account books [and invoices provided to the organization].

O. A written agreement specifying the terms of lease or rental shall be required for any equipment used to distribute, play, or redeem electronic gaming provided to an organization or permitted supplier.

P. A manufacturer shall notify the department when an electronic gaming device bearing a device tag affixed by the department is moved from one location to any other location.

Article 2
General Requirements

11VAC20-20-180. Approval of distributed pull-tab systems, validation systems, point-of-sale stations, and redemption terminals; approval of game themes and sounds.

A. The department shall set manufacturing and testing criteria for all distributed pull-tab systems, validation systems, point-of-sale stations, redemption terminals, and other equipment used in the conduct of charitable gaming. A distributed pull-tab system, validation system, point-of-sale station, redemption terminal, or other equipment shall not be sold, leased, or otherwise furnished to any person in the Commonwealth of Virginia for use in the conduct of charitable gaming until an identical sample system or equipment containing identical software has been certified by a testing facility that has been formally recognized by the department as a testing facility that upholds the standards of integrity established by the department. The testing facility must certify that the distributed pull-tab system and associated hardware and software conform, at a minimum, to the requirements set forth in this chapter. Once the testing facility reports the test results to the department, the department will either approve or disapprove the distributed pull-tab system or system components and inform the manufacturer of the results. If any such system or equipment does not meet the department's criteria, it shall be recalled and shall not be distributed in the Commonwealth of Virginia. The cost of testing shall be borne by the manufacturer of such equipment.

B. No supplier or manufacturer shall knowingly sell or otherwise provide to an organization and no organization shall knowingly use a distributed pull-tab system, validation system, point-of- sale station, redemption terminal, or other equipment used to conduct charitable gaming unless it conforms to the requirements set forth in this chapter.

C. If a defect in a distributed pull-tab system, validation system, point-of-sale station, redemption terminal, or other equipment used to conduct charitable gaming is discovered by or reported to the department, the department shall notify the manufacturer of the system or equipment containing the alleged defect. Should the department, in consultation with the manufacturer, determine that a defect exists and should the department determine the defect affects game security or otherwise threatens public confidence in the game, the department may, with respect to any distributed pull-tab system, validation system, point of sale station, redemption terminal, or other equipment used to conduct charitable gaming still located within the Commonwealth of Virginia, require the supplier or manufacturer to issue a recall of all affected distributed pull-tab systems, validation systems, point-of-sale stations, redemption terminals, or other equipment.

D. All game themes, sounds, and music shall be approved by the department prior to being available for play on an electronic gaming device in the Commonwealth of Virginia.

E. All distributed pull-tab systems and electronic gaming devices, including the device's internal system and records, shall be fully accessible to the department at all times upon request.

Article 3
System Requirements

11VAC20-20-190. Distributed pull-tab system.

A distributed pull-tab system shall be dedicated primarily to electronic accounting, reporting, and the presentation, randomization, and transmission of electronic gaming to the electronic gaming devices. It shall also be capable of generating the data necessary to provide the reports required within this article or otherwise specified by the department.

11VAC20-20-200. Dispensing of electronic pull-tabs.

A distributed pull-tab system shall dispense, upon request, an electronic pull-tab. All games must be played without replacement, drawing from a single finite game set.

11VAC20-20-210. Game set requirements.

Each game set shall meet the following minimum requirements:

1. Each game set shall be made up of a finite number of electronic pull-tabs;

2. The game set shall consist of a maximum of 25,000 electronic pull-tabs;

3. All electronic pull-tabs in a particular game set shall be of the same purchase price;

4. The maximum win amount awarded per any one electronic pull-tab shall not exceed the value set forth for pull-tabs by § 18.2-340.33 of the Code of Virginia;

5. Each game set shall be assigned a unique serial number;

6. After randomization, game sets may be broken into subsets of equal size. If game subsets are used, they shall each be assigned a unique serial number and be traceable to a parent game set; and

7. Game sets shall not be commingled.

11VAC20-20-220. Game set definition.

If the system has the capability to create a game set from a predefined set of criteria, the criteria must contain the following information:

1. Game identification;

2. Game set version;

3. Manufacturer;

4. Game name;

5. Paytable identification;

6. Purchase price per electronic pull-tab;

7. Subset size;

8. Total number of subsets; and

9. Prize values with an associated index and frequency.

11VAC20-20-230. Data required to be available for each game set.

A. The following data shall be available prior to the opening of a game set for distribution and shall be maintained and be viewable both electronically and, if requested, by printed report, upon demand:

1. A unique serial number identifying each game set or subset;

2. A description of the game set sufficient to categorize the game set or subset relative to other game sets;

3. The total number of electronic pull-tabs in the game set;

4. The number of game subsets to be created from the game set and the number of electronic pull-tabs in each subset when applicable;

5. The payout percentage of the entire game set;

6. The purchase price per electronic pull-tab assigned to the game set; and

7. Prize values with an associated index and frequency.

B. The following data shall be available subsequent to the completion of a game set and shall be maintained and viewable both electronically and, if requested, by printed report, upon demand:

1. A unique serial number identifying each game set or subset;

2. Description of the game set sufficient to categorize the game set relative to other game sets;

3. The total number of electronic pull-tabs unsold;

4. The total number of electronic pull-tabs purchased;

5. The time and date that the game set or each game subset became available for play;

6. The time and date that the game set or each game subset was completed or removed from play;

7. Location where game set or subset was played;

8. The final payout percentage of the game set when removed from play; and

9. The purchase price per electronic pull-tab assigned to the game set.

C. In order to provide maximum game integrity, no audit or other determination of the status of any game set or any subset, including a determination of the prizes won or prizes remaining to be won, shall be conducted by anyone while a game set or subset is in play without causing termination of the entire game set or subset. Only upon game set termination shall the details of the associated game set and subsets be revealed to the individual performing the audit.

D. Once terminated, a game set shall not be able to be reopened.

11VAC20-20-240. Security requirements.

A. A distributed pull-tab system computer must be in a locked, secure enclosure with key controls in place.

B. A distributed pull-tab system shall provide a means for terminating the game set if information about electronic pull-tabs in an open game set has been accessed or at the discretion of the department. In such cases, traceability of unauthorized access, including time and date, users involved, and any other relevant information shall be available.

C. A distributed pull-tab system shall not permit the alteration of any accounting or significant event information that was communicated from the electronic gaming device without supervised access controls. In the event financial data is changed, an automated audit log must be capable of being produced to document the following:

1. Data element altered;

2. Data element value prior to alteration;

3. Data element value after alteration;

4. Time and date of alteration; and

5. Personnel that performed alteration.

D. A distributed pull-tab system must provide password security or other secure means of ensuring data integrity and enforcing user permissions for all system components through the following means:

1. All programs and data files must only be accessible via the entry of a password that will be known only to authorized personnel;

2. The distributed pull-tab system must have multiple security access levels to control and restrict different classes;

3. The distributed pull-tab system access accounts must be unique when assigned to the authorized personnel and shared accounts amongst authorized personnel must not be allowed;

4. The storage of passwords and personal identification numbers must be in an encrypted, nonreversible form; and

5. A program or report must be available that will list all registered users on the distributed pull-tab system, including the registered user's privilege level.

E. All components of a distributed pull-tab system that allow access to users, other than end- users for game play, must have a password sign-on with two-level codes comprising the personal identification code and a personal password.

1. The personal identification code must have a length of at least six American Standard Code for Information Interchange (ASCII) characters; and

2. The personal password must have a minimum length of six alphanumeric characters, which should include at least one nonalphabetic character.

F. A distributed pull-tab system must have the capability to control potential data corruption that can be created by multiple simultaneous log-ons by system management personnel.

1. A distributed pull-tab system shall specify which of the access levels allow for multiple simultaneous sign-ons by different users and which of the access levels do not allow for multiple sign-ons, and if multiple sign-ons are possible, what restrictions, if any, exist; or

2. If a distributed pull-tab system does not provide adequate control, a comprehensive procedural control document must be drafted for the department's review and approval.

G. Distributed pull-tab system software components or modules shall be verifiable by a secure means at the system level. A distributed pull-tab system shall have the ability to allow for an independent integrity check of the components or modules from an outside source, and an independent integrity check is required for all control programs that may affect the integrity of the distributed pull-tab system. This must be accomplished by being authenticated by a third-party device, which may be embedded within the distributed pull-tab system software or having an interface or procedure for a third-party application to authenticate the component. This integrity check will provide a means for field verification of the distributed pull-tab system components.

H. A distributed pull-tab system may be used to configure and perform security checks on electronic gaming devices, provided such functions do not affect the security, integrity, or outcome of any game and meets the requirements set forth in this chapter regarding program storage devices.

11VAC20-20-250. Backup and recovery.

A. A distributed pull-tab system computer shall have a separate physical medium for securely storing game sets or subsets on the computer, which shall be mirrored in real time by a backup medium.

B. All data required to be available or reported by this chapter must be retained for a period of not less than three years from the close of the fiscal year.

C. All storage of critical data shall utilize error checking and be stored on a nonvolatile physical medium.

D. The database shall be stored on redundant media so that no single failure of any portion of the system would result in the loss or corruption of data.

E. In the event of a catastrophic failure when the distributed pull-tab system cannot be restarted in any other way, it shall be possible to reload the distributed pull-tab system from the last viable backup point and fully recover the contents of that backup, to consist of at least the following information:

1. All significant events;

2. All accounting information;

3. Auditing information, including all open game sets and the summary of completed game sets; and

4. Employee files with access levels.

11VAC20-20-260. Electronic accounting and reporting.

A. One or more electronic accounting systems shall be required to perform reporting and other functions in support of distributed pull-tab systems. The electronic accounting system shall not interfere with the outcome of any gaming function.

B. The following reporting capabilities must be provided by the electronic accounting system:

1. Electronic pull-tab game set report – game sets in play. An electronic pull-tab game set report must be available on demand for each game set currently in play. Game cards, outcomes, or prizes must not be revealed. The report must contain the following information:

a. A unique serial number identifying each game set or subset;

b. A description of the game set sufficient to categorize the game set or subset relative to other game sets;

c. The total number of electronic pull-tabs in the game set;

d. The number of game subsets to be created from the game set and the number of electronic pull-tabs in each subset when applicable;

e. The theoretical payout percentage of the entire game set;

f. The purchase price per electronic pull-tab assigned to the game set;

g. The time and date that the game set or each game subset became available for play; and

h. The location where the game set or subset is being played.

2. Electronic pull-tab game set report – completed game set. An electronic pull-tab game set report must be available on demand, for each completed game set. The report must contain the following information:

a. A unique serial number identifying each game set or subset;

b. Description of the game set sufficient to categorize the game set relative to other game sets;

c. The total number of electronic pull-tabs unsold;

d. The total number of electronic pull-tabs purchased;

e. The time and date that the game set or each game subset became available for play;

f. The time and date that the game set or each game subset was completed or removed from play;

g. The location where game set or subset was played;

h. The final payout percentage of the game set when removed from play; and

i. The purchase price per electronic pull-tab assigned to the game set.

3. A report that shall indicate all prizes that exceed the threshold that triggers additional procedures to be followed for the purpose of compliance with federal tax reporting requirements. At a minimum, on a daily and monthly basis, the report shall provide the following information per electronic gaming device:

a. The date and time won;

b. The location of prize award; and

c. The amount of each prize occurrence.

4. Liability report. A liability report shall provide a summary of the outstanding funds that carry from business day to business day. At a minimum, this report shall include:

a. Amount of prizes or vouchers that were awarded in dollars and cents, but have not yet been claimed that have not yet expired; and

b. Summary of all outstanding accounts.

C. A distributed pull-tab system shall be capable of providing an electronic file in a format specified by the department on a periodic basis to a location specified by the department. The data to be reported will contain, at a minimum, the following items per session:

1. Organization information;

2. Session date;

3. Total cash in;

4. Total cash out;

5. Total cash played;

6. Total cash won;

7. For all game sets on the system in play or in inventory:

a. Serial number;

b. Description;

c. Ticket price;

d. Number of subsets if applicable;

e. Number of tickets or number of tickets per subset;

f. Theoretical return percentage; and

g. Date game set was opened for play, when applicable; and

8. For all game sets completed or close since the previous reporting date:

a. Serial number;

b. Description;

c. Ticket price;

d. Number of subsets, if applicable;

e. Number of tickets or number of tickets per subset;

f. Theoretical return percentage;

g. Date game set was opened;

h. Date game set was closed;

i. Total tickets sold;

j. Total dollars in;

k. Total prizes paid; and

l. Actual return percentage.

11VAC20-20-270. Randomization.

A. As used in this section, unless the context requires a different meaning:

"Card position" means the first card dealt, second card dealt in sequential order.

"Number position" means the first number drawn in sequential order.

B. A distributed pull-tab system shall utilize randomizing procedures in the creation of game sets for electronic pull-tabs or externally generated randomized game sets that have been created using a method previously approved by the department.

C. Any random number generation, shuffling, or randomization of outcomes used in connection with a distributed pull-tab system must be by use of a random number generation application that has successfully passed standard tests for randomness and unpredictability including:

1. Each card position or number position satisfies the 99% confidence limit using the standard chi-squared analysis. "Chi-squared analysis" is the sum of the ratio of the square

difference between the expected result and the observed result to the expected result.

2. Each card position or number position does not produce a significant statistic with regard to producing patterns of occurrences. Each card position or number position will be considered random if it meets the 99% confidence level with regard to the "run test" or any similar pattern testing statistic. The "run test" is a mathematical statistic that determines the existence of recurring patterns within a set of data.

3. Each card position or number position is independently chosen without regard to any other card or number drawn within that game play. This test is the "correlation test." Each pair of card positions or number positions is considered random if it meets the 99% confidence level using standard correlation analysis.

4. Each card position or number position is independently chosen without reference to the same card position or number position in the previous game. This test is the "serial correlation test." Each card position or number position is considered random if it meets the 99% confidence level using standard serial correlation analysis.

11VAC20-20-280. Communications and network requirements.

A. Where the distributed pull-tab system components are linked with one another in a network, communication protocols shall be used that ensure that erroneous data or signals will not adversely affect the operations of any such system components.

B. All data communication shall incorporate an error detection and correction scheme to ensure the data is transmitted and received accurately.

C. Connections between all components of the distributed pull-tab system shall only be through the use of secure communication protocols that are designed to prevent unauthorized access or tampering, employing Advanced Encryption Standard (AES) or equivalent encryption.

D. A firewall or equivalent hardware device configured to block all inbound and outbound traffic that has not been expressly permitted and is not required for continued use of the distributed pull-tab system must exist between the distributed pull-tab system and any external point of access.

E. The minimum width (size) for encryption keys is 112 bits for symmetric algorithms and 1024 bits for public keys.

F. There must be a secure method implemented for changing the current encryption key set. It is not acceptable to only use the current key set to "encrypt" the next set.

G. There must be a secure method in place for the storage of any encryption keys. Encryption keys must not be stored without being encrypted themselves.

H. If a wireless network is used, wireless products used in conjunction with any gaming system or system component must meet the following minimum standards:

1. Employ a security process that complies with the Federal Information Processing Standard 140-2 (FIPS 140-2); or

2. Employ an alternative method, as approved by the department.

11VAC20-20-290. Significant events.

The following significant events, if applicable, shall be collected from the electronic gaming device or point of sale and communicated to the system for storage and a report of the occurrence of the significant event must be made available upon request:

1. Power resets or power failure.

2. Communication loss between an electronic gaming device and any component of the distributed pull-tab system.

3. Electronic gaming device jackpot (any award in excess of the single win limit of the electronic gaming device).

4. Door openings (any external door that accesses a critical area of the electronic gaming device).

5. Bill validator errors:

a. Stacker full (if supported); and

b. Bill jam.

6. Printer errors:

a. Printer empty; and

b. Printer disconnect or failure.

7. Corruption of the electronic gaming device RAM or program storage device.

8. Any other significant events as defined by the protocol employed by the distributed pull-tab system.

11VAC20-20-300. Validation system and redemption.

A distributed pull-tab system may utilize a voucher validation system to facilitate gaming transactions. The validation system may be entirely integrated into a distributed pull-tab system or exist as a separate entity.

1. A distributed pull-tab system may allow voucher out only; vouchers shall not be inserted, scanned, or used in any way at the electronic gaming device for redemption.

2. The validation system must process voucher redemption correctly according to the secure communication protocol implemented.

3. The algorithm or method used by the validation system or distributed pull-tab system to generate the voucher validation numbers must guarantee an insignificant percentage of repetitive validation numbers.

4. The validation system must retrieve the voucher information correctly based on the secure communication protocol implemented and store the voucher information in a database. The voucher record on the host system must contain, at a minimum, the following voucher information:

a. Validation number;

b. Date and time the electronic gaming device printed the voucher;

c. Value of voucher in dollars and cents;

d. Status of voucher;

e. Date and time the voucher will expire;

f. Serial number of electronic gaming device; and

g. Location name or site identifier.

5. The validation system or distributed pull-tab system must have the ability to identify the following occurrences and notify the cashier when the following conditions exist:

a. Voucher cannot be found on file;

b. Voucher has already been paid; or

c. Amount of the voucher differs from the amount on file (requirement may be met by display of voucher amount for confirmation by cashier during the redemption process).

6. If the connection between the validation system and the distributed pull-tab system fails, an alternate method or procedure of payment must be available and shall include the ability to identify duplicate vouchers and prevent fraud by redeeming vouchers that were previously issued by the electronic gaming device.

7. The following reports related to vouchers shall be generated on demand:

a. Voucher Issuance Report shall be available from the validation system that shows all vouchers generated by an electronic gaming device; and

b. Voucher Redemption Report shall detail individual vouchers and the sum of the vouchers paid by the validation terminal or point of sale by session and shall include the following information:

(1) The date and time of the transaction;

(2) The dollar value of the transaction;

(3) The validation number;

(4) A transaction number; and

(5) The point-of-sale identification number or name.

8. The validation system database must be encrypted and password protected and should possess an unalterable user audit trail to prevent unauthorized access.

9. The normal operation of any device that holds voucher information shall not have any options or method that may compromise voucher information. Any device that holds voucher information in its memory shall not allow removal of the information unless it has first transferred that information to the ticketing database or other secured component of the validation system.

11VAC20-20-310. Point of sale; validation terminal.

A. A distributed pull-tab system may utilize a point-of-sale or validation terminal that is capable of facilitating the sale of the organization's pull tab outcomes or used for the redemption of credits from player accounts or vouchers. The point of sale may be entirely integrated into a distributed pull-tab system or exist as a separate entity.

B. Point-of-sale use is only permissible when the device is linked to an approved validation system or distributed pull-tab system.

C. If a distributed pull-tab system utilizes a point of sale, it shall be capable of printing a receipt for each sale, void, or redemption. The receipt shall contain the following information:

1. Date and time of the transaction;

2. Dollar value of the transaction;

3. Validation number, if applicable;

4. Quantity of associated products, if applicable;

5. Transaction number;

6. Account number, if applicable; and

7. Point-of-sale identification number or name.

D. The following point-of-sale or validation terminal reports shall be generated on demand:

1. Sales transaction history report shall show all sales and voids by session and include the following information:

a. Date and time of the transaction;

b. Dollar value of the transaction;

c. Quantity of associated products;

d. Transaction number; and

e. Point of sale identification number or name.

2. Voucher redemption report shall detail individual voucher redemptions paid by the validation terminal or point of sale by session and include the following information:

a. Date and time of the transaction;

b. Dollar value of the transaction;

c. Validation number;

d. Transaction number; and

e. Point of sale identification number or name.

11VAC20-20-320. Location of equipment.

All equipment used to facilitate the distribution, play, or redemption of electronic games must be physically located

within the boundaries of the Commonwealth of Virginia. This includes the distributed pull-tab system, electronic gaming devices, redemption terminals, and point-of-sale stations.

Article 4
Electronic Gaming Devices

11VAC20-20-330. Electronic gaming device general requirements.

A. Each electronic gaming device shall bear a tamper evident seal and individual serial number affixed by the department.

B. An electronic gaming device shall only be used for electronic gaming.

C. In addition to a video monitor or touch screen, each electronic gaming device may have one or more of the following: a bill acceptor, printer, and electromechanical buttons for activating the game and providing player input, including a means for the player to make selections and choices in games.

D. For each electronic gaming device, there shall be located anywhere within the distributed pull-tab system, nonvolatile memory or its equivalent. The memory shall be maintained in a secure location for the purpose of storing and preserving a set of critical data that has been error checked in accordance with the critical memory requirements of this chapter.

E. An electronic gaming device shall not have any switches, jumpers, wire posts, or other means of manipulation that could affect the operation or outcome of a game. The electronic gaming device may not have any functions or parameters adjustable through any separate video display or input codes except for the adjustment of features that are wholly cosmetic.

F. An electronic gaming device shall not have any of the following attributes: spinning or mechanical reels, pull handle, sounds or music solely intended to entice a player to play, flashing lights, tower light, top box, coin tray, ticket acceptance, hopper, coin acceptor, enhanced animation, cabinet or payglass artwork, or any other attribute identified by the department.

G. An electronic gaming device shall be robust enough to withstand forced illegal entry that would leave behind physical evidence of the attempted entry or such entry that causes an error code that is displayed and transmitted to the distributed pull-tab system. Any such entry attempt shall inhibit game play until cleared and shall not affect the subsequent play or any other play, prize, or aspect of the game.

H. The [~~number~~ quantity] of electronic gaming devices present at a social organization's location at which electronic gaming is operated and conducted shall not exceed the number authorized by the department for such location.

11VAC20-20-340. Cabinet wiring.

A. Proof of Underwriter Laboratories (UL) or equivalent certification shall be required for all submitted electronic devices.

B. An electronic gaming device shall be designed so that power and data cables into and out of the electronic gaming device can be routed so that the cables are not accessible to the general public.

11VAC20-20-350. Electronic gaming device identification.

An electronic gaming device shall have a permanently affixed device [~~tag~~ identifier] that cannot be removed without leaving evidence of tampering. This device [~~tag~~ identifier] shall be affixed to the exterior of the electronic gaming device and shall include the following information:

1. The manufacturer name;

2. A unique serial number;

3. The electronic gaming device model number;

4. The date of manufacture; and

5. Any other information required by the department.

11VAC20-20-360. Doors; compartments.

A. If an electronic gaming device possesses an external door that allows access to the interior of the machine the following rules shall apply:

1. Doors and their associated hinges shall be capable of withstanding determined illegal efforts to gain access to the inside of the electronic gaming device and shall leave evidence of tampering if an illegal entry is made;

2. All external doors shall be locked and monitored by door access sensors that shall detect and report all external door openings by way of an audible alarm, on-screen display, or both;

3. The electronic gaming device shall cease play when any external door is opened;

4. It shall not be possible to disable a door open sensor when the machine's door is closed without leaving evidence of tampering;

5. The sensor system shall register a door as being open when the door is moved from its fully closed and locked position; and

6. Door open conditions shall be recorded in an electronic log that includes a date and time stamp.

B. Electronic gaming devices that contain control programs located within an accessible area shall have a separate internal locked logic compartment that shall be keyed differently than the front door access lock. The logic compartment shall be a locked cabinet area with its own locked door that houses

critical electronic components that have the potential to significantly influence the operation of the electronic gaming device. There may be more than one such logic area in an electronic gaming device. Electronic component items that are required to be housed in one or more logic areas are:

1. Central processing units and other electronic components involved in the operation and calculation or display of game play;

2. Communication controller electronics and components housing the communication program storage media or the communication board for the online system may reside outside the electronic gaming device; and

3. Logic compartment door open conditions shall be recorded in a log that includes a date and time stamp.

C. Electronic gaming devices that do not contain a door shall have adequate security for any panels or entry points that allow access to the interior of the device.

11VAC20-20-370. Memory clear.

A. Following the initiation of a memory reset procedure utilizing a certified reset method, the program shall execute a routine that initializes the entire contents of memory to the default state. For electronic gaming devices that allow for partial memory clears, the methodology in doing so must be accurate and the game application must validate the uncleared portions of memory. The electronic gaming device display after a memory reset shall not be the top award.

B. It shall not be possible to change a configuration setting that causes an alteration or obstruction to the electronic accounting meters without a memory clear.

11VAC20-20-380. Critical memory.

A. Critical memory shall be used to store all data that is considered vital to the continued operation of the electronic gaming device. Critical memory storage shall be maintained by a methodology that enables errors to be identified and corrected in most circumstances. This methodology may involve signatures, checksums, partial checksums, multiple copies, timestamps, or use of validity codes. This includes:

1. All electronic meters required in 11VAC20-20-440 E;

2. Current unused credits;

3. Electronic gaming device or game configuration data;

4. Recall of all wagers and other information necessary to fully reconstruct the game outcome associated with the last 10 plays;

5. Software state, which is the last state the electronic gaming device software was in before interruption; and

6. Error conditions that may have occurred on the electronic gaming device that may include:

a. Memory error or control program error;

b. Low memory battery, for batteries external to the memory itself or low power source;

c. Program error or authentication mismatch; and

d. Power reset.

B. Comprehensive checks of critical memory shall be made continually to test for possible corruption. In addition, all critical memory:

1. Shall have the ability to retain data for a minimum of 180 days after power is discontinued from the electronic gaming device. If the method used is an off-chip battery source, it shall recharge itself to its full potential in a maximum of 24 hours. The shelf life shall be at least five years. Memory that uses an off-chip back-up power source to retain its contents when the main power is switched off shall have a detection system that will provide a method for software to interpret and act upon a low battery condition;

2. Shall only be cleared by a department certified memory clear method; and

3. Shall result in an error if the control program detects an unrecoverable memory error.

11VAC20-20-390. Program storage devices.

A. All program storage devices (writable/nonwritable), including erasable programmable read only memory (EPROM), DVD, CD-ROM, compact flash, and any other type of program storage device shall be clearly marked with sufficient information to identify the software and revision level of the information stored in the devices.

B. Program storage devices shall meet the following requirements:

1. Program storage, including CD-ROM, shall meet the following rules:

a. The control program shall authenticate all critical files by employing a hashing algorithm that produces a "message digest" output of at least 128 bits at minimum, as certified by the recognized independent test laboratory and agreed upon by the department. Any message digest shall be stored on a read-only memory device within the electronic gaming device. Any message digest that resides on any other medium shall be encrypted using a public/private key algorithm with a minimum of a 512-bit key or an equivalent encryption algorithm with similar security certified by the independent test laboratory and agreed upon by the department.

b. The electronic gaming device shall authenticate all critical files against the stored message digests. In the event of a failed authentication, the electronic gaming device should immediately enter an error condition with the appropriate indication, such as an audible signal, on-screen display, or both. This error shall require operator

intervention to clear. The electronic gaming device shall display specific error information and shall not clear until the file authenticates properly or the electronic gaming device's memory is cleared, the game is restarted, and all files authenticate correctly.

2. CD-ROM specific based program storage shall:

a. Not be a rewritable disk; and

b. The "write session" shall be closed to prevent any further writing to the storage device.

C. Electronic gaming devices where the control program is capable of being erased and reprogrammed without being removed from the electronic gaming device or other equipment or related peripheral devices shall meet the following requirements:

1. Reprogrammable program storage shall only write to alterable storage media containing data, files, and programs that are not critical to the basic operation of the game.

2. Notwithstanding subdivision 1 of this subsection, data may be written to media containing critical data, files, and programs provided that:

a. A log of all information that is added, deleted, and modified be stored on the media;

b. The control program verifies the validity of all data, files, and programs that reside on the media using the methods required herein;

c. The electronic gaming device's program contains appropriate security to prevent unauthorized modifications; and

d. The electronic gaming device's program does not allow game play while the media containing the critical data, files, and programs is being modified.

D. The control program shall ensure the integrity of all critical program components during the execution of said components and the first time the files are loaded for use even if only partially loaded. Space that is not critical to machine security (e.g., video or sound) is not required to be validated, although the department recommends a method be in place for the files to be tested for corruption. If any of the video or sound files contain payout amounts or other information needed by the player, the files are to be considered critical.

11VAC20-20-400. Touch screens.

Any touch screen must meet the following rules:

1. A touch screen shall be accurate once calibrated;

2. A touch screen shall be able to be recalibrated; and

3. A touch screen shall have no hidden or undocumented buttons or touch points anywhere on the touch screen, except as provided for by the game rules that affect game play.

11VAC20-20-410. Bill acceptors.

A. An electronic gaming device may have a mechanism that accepts United States currency and provides a method to enable the electronic gaming device software to interpret and act appropriately upon a valid or invalid input.

B. An acceptance device shall be electronically based and be configured to ensure that it only accepts valid bills and rejects all others in a highly accurate manner.

C. A bill input system shall be constructed in a manner that protects against vandalism, abuse, or fraudulent activity. In addition, a bill acceptance device shall only register credits when:

1. The bill has passed the point where it is accepted and stacked; and

2. The bill acceptor has sent the "irrevocably stacked" message to the machine.

D. A bill acceptor shall communicate to the electronic gaming device using a bidirectional protocol.

E. A bill acceptor shall be designed to prevent the use of cheating methods such as stringing, the insertion of foreign objects, and any other manipulation that may be deemed as a cheating technique.

F. If a bill acceptor is designed to be factory set only, it shall not be possible to access or conduct maintenance or adjustments to that bill acceptor in the field, other than:

1. The selection of bills and their limits;

2. Changing of a certified erasable programmable read-only memory or downloading of certified software;

3. The method for adjustment of the tolerance level for accepting bills of varying quality should not be accessible from the exterior of the electronic gaming device. Adjustments of the tolerance level should only be allowed with adequate levels of security in place. This can be accomplished through lock and key, physical switch settings, or other accepted methods approved on a case-by-case basis;

4. The maintenance, adjustment, and repair per approved factory procedures; and

5. The options that set the direction or orientation of bill acceptance.

G. An electronic gaming device equipped with a bill acceptor shall have the capability of detecting and displaying an error condition for the following events:

1. Stacker full (it is recommended that an explicit "stacker full" error message not be utilized since this may cause a security issue);

2. Bill jams;

3. Bill acceptor door open. If a bill acceptor door is a machine door, a door open signal is sufficient;

4. Stacker door open; and

5. Stacker removed.

H. An electronic gaming device equipped with a bill acceptor shall maintain sufficient electronic metering to be able to report the following:

1. Total monetary value of all bills accepted;

2. Total number of all bills accepted;

3. A breakdown of the bills accepted for each denomination; and

4. The value of the last five items accepted by the bill acceptor.

11VAC20-20-420. Payment by voucher printers.

A. If the electronic gaming device has a printer that is used to issue payment to the player by issuing a printed voucher for any unused game plays or winnings, the electronic gaming device shall meet the following rules:

1. The printer shall be located in a secure area of the electronic gaming device, but shall not be located in the logic area or any cash storage area. The bill acceptor stacker or logic areas containing critical electronic components shall not be accessed when the printer paper is changed; and

2. Data printed on a voucher shall include the following information regarding each voucher printed:

a. Value of unused game plays or winnings in United States currency, in numerical form;

b. Time the voucher was printed;

c. Date the voucher was printed;

d. Location name or site identifier;

e. Serial number of electronic gaming device;

f. Unique validation number or barcode if used in conjunction with a validation system; and

g. Expiration date and time.

B. If the electronic gaming device is capable of printing a duplicate voucher, the duplicate voucher shall clearly state the word "DUPLICATE" on its face.

C. The printer shall use printer paper containing security features such as a watermark as approved by the department.

D. A printer shall have mechanisms to allow the electronic gaming device to interpret and act upon the following conditions that must disable the game, and produce an error condition that requires attendant intervention to resume play:

1. Out of paper;

2. Printer jam or failure; and

3. Printer disconnect. The electronic gaming device may detect this error condition when the game tries to print.

E. An electronic gaming device that uses a voucher printer shall maintain a minimum of the last 25 transactions in critical memory. All voucher transactions shall be logged with a date and time stamp.

11VAC20-20-430. Payment by account.

A. Credit may be added to a player account via a cashier or point of sale station. Credit may also be added by any supporting electronic gaming device through credits won or bills.

B. Money may be removed from a player account either through downloading of credits to the electronic gaming device or by cashing out at a cashier's or point-of-sale station.

C. All monetary transactions between a supporting electronic gaming device and the distributed pull-tab system must be secured by means of a card insertion into a magnetic card reader and personal identification number (PIN) entry or by other protected means.

Article 5
Game Requirements

11VAC20-20-440. Game play requirements.

A. A player receives an electronic pull-tab in return for consideration. A player wins if the player's electronic pull-tab contains a combination of symbols or numbers that was designated in advance of the game as a winning combination. There may be multiple winning combinations in each game. Electronic versions of instant bingo and pull-tabs, as authorized by the department, shall only utilize electronic gaming devices that allow players to play electronic pull-tabs. An electronic gaming device shall meet the following minimum requirements:

1. A player may purchase an opportunity to play an electronic pull-tab by:

a. Insertion of United States currency (bills only);

b. Purchase made at a point of sale terminal; or

c. Withdrawing deposits available in a player account.

2. The available games, flare, and rules of play shall be displayed on the electronic gaming device's video screen. Rules of play shall include all winning combinations.

3. Any number of game themes may be selectable for play on any given electronic gaming device. Only one of the game themes shall be playable at any given time.

4. An electronic gaming device shall be clearly labeled so as to inform the public that no one younger than 21 years of age is allowed to play.

5. An electronic gaming device shall not be capable of displaying any enticing animation while in an idle state. An

electronic gaming device may use simple display elements or screen savers to prevent monitor damage.

6. The results of the electronic pull-tab shall be shown to the player using a video display. No rolling, flashing, or spinning animations are permitted. No rotating reels marked into horizontal segments by varying symbols are permitted.

7. Any sound or music solely intended to entice a player to play is prohibited. Any sound or music emitted by an electronic gaming device must not be played at a level sufficient to disturb other players or patrons.

8. The electronic gaming device shall have one or more buttons, electromechanical or touch screen, to facilitate the following functions:

a. Viewing of the game "help" screens;

b. Viewing of the game rules;

c. Initiating game play;

d. Cashout or logout; and

e. One or more buttons designated to reveal the pull-tab or instant bingo windows.

9. Following play on an electronic gaming device, the result shall be clearly shown on the video display along with any prizes that may have been awarded. Prizes may be dispensed in the form of:

a. Voucher;

b. Added to the machine balance meter; or

c. Added to the player's account balance.

10. An available balance may be collected from the electronic gaming device by the player pressing the "cashout" button or logging off of the electronic gaming device at any time other than during:

a. A game being played;

b. While in an audit mode or screen;

c. Any door open;

d. Test mode;

e. A machine balance meter or win meter incrementation unless the entire amount is placed on the meter when the "cashout" button is pressed; or

f. An error condition.

11. The default electronic gaming device display, upon entering game play mode, shall not be the top award.

B. An electronic gaming device shall not have hardware or software that determines the outcome of any electronic pull-tab, produce its own outcome, or affect the order of electronic pull-tabs as dispensed from the distributed pull-tab system. The game outcome shall be determined by the distributed pull-tab system as outlined within this chapter.

C. Game themes shall not contain obscene or offensive graphics, animations, or references. The department shall determine what constitutes obscene or offensive graphics, animations, or references.

D. Prior to approval for use, each electronic gaming device must meet the following specifications with respect to its operation:

1. After accepting an allowable cash payment from the player, the player shall press a "play" button to initiate a game.

2. The electronic gaming device shall not display in any manner, the number of electronic pull-tabs of each finite category, or how many cards remain.

3. Awards of merchandise prizes in lieu of cash are prohibited.

4. The player must interact with the device to initiate a game and reveal a win or loss. This may involve a button press on the console or on the touch screen.

5. The electronic pull-tab must be initially displayed with a cover and require player interaction to reveal the symbols and game outcome.

6. In no event may an electronic gaming device simulate play of roulette, poker, keno, lotto or lottery, twenty-one, blackjack, or any other card game, or simulate play of any type of slot machine game, regardless of whether the machine has a payback feature or extra play awards.

7. Card symbols such as ace, king, queen, or heart are acceptable, provided the device abides by the prohibition in subdivision 6 of this subsection.

8. Games must not contain any elements of skill.

E. Each electronic gaming device must meet the following specifications with respect to its metering system:

1. An electronic gaming device shall contain electronic metering whereby meters record and display on the video screen the following information at a minimum:

a. Total cash in for the bill acceptor if equipped with a bill acceptor;

b. Total cash played;

c. Total cash won;

d. Total cash removed from electronic gaming device;

e. Total count of electronic pull-tabs played; and

f. Total count of electronic pull-tabs won.

2. An electronic meter shall be capable of maintaining correct totals and be of no less than 10 digits in length.

3. An electronic gaming device shall not be capable of displaying the number of electronic pull-tabs that remain in the game set or the number of winners or losers that have been drawn or still remain in the game set while the game set is still being played.

4. An electronic meter shall not be capable of being automatically reset or cleared, whether due to an error in any aspect of the meter's or a game's operation or otherwise.

5. Currency meters shall be maintained in dollars and cents.

Part V
Network Bingo

Article 1
Network Bingo Providers

11VAC20-20-450. Network bingo providers: application, qualifications, suspension, revocation or refusal to renew permit, maintenance, and production of records.

A. Prior to providing network bingo, a network bingo provider shall submit an application on a form prescribed by the department and receive a permit. A $500 application fee payable to the Treasurer of Virginia is required. In addition, a network bingo provider must be authorized to conduct business in the Commonwealth of Virginia, which may include registration with the State Corporation Commission, the Department of Taxation, and the Virginia Employment Commission. The actual cost of background investigations for a permit may be billed by the department to an applicant.

B. The department may refuse to issue a permit or may suspend or revoke a permit if an officer, director, partner, employee, agent, or owner:

1. Is operating without a valid license, permit, or certificate as a supplier, manufacturer, or network bingo provider in any state in the United States;

2. Fails or refuses to recall a product as directed by the department;

3. Conducts business with unauthorized entities or is not authorized to conduct business in the Commonwealth of Virginia;

4. Has been convicted of or pleaded nolo contendere to any crime as specified by § 18.2- 340.34:2 B of the Code of Virginia; has had any license, permit, certificate, or other authority related to activities defined as charitable gaming in the Commonwealth suspended or revoked in the Commonwealth or in any other jurisdiction; has failed to file or has been delinquent in excess of one year in the filing of any tax returns or the payment of any taxes due the Commonwealth; or has failed to establish a registered office or registered agent in the Commonwealth if so required by § 13.1-634 or 13.1-763 of the Code of Virginia. As this provision relates to employees or agents, it shall only apply to individuals involved in sales to or solicitations of customers in the Commonwealth of Virginia;

5. Fails to notify the department within 20 days of the occurrence, knowledge, or receipt of the filing of any administrative or legal action relating to charitable gaming or network bingo involving or concerning the network bingo provider, any officer or director, employees, agent, or owner during the term of its permit;

6. Fails to provide to the department upon request a current Letter for Company Registration on file with the U.S. Department of Justice if required in accordance with the Gambling Devices Act of 1962 (15 USC §§ 1171 through 1178) for any device that it distributes in the Commonwealth of Virginia; or

7. Has been engaged in conduct that would compromise the department's objective of maintaining the highest level of integrity in charitable gaming.

C. A network bingo provider shall not distribute a network bingo system, network bingo supplies, or other incidental items to perform network bingo to anyone in the Commonwealth of Virginia or to an organization for use upon the premises owned or exclusively leased by the organization in which the portion of the premises are qualified to sell pull-tabs to members and their guests only as authorized by § 18.2-340.26:1 of the Code of Virginia. However, a network bingo provider may:

1. Distribute such a system, supply, or item to a qualified organization authorized to conduct charitable gaming for use during a session that is open to the public and not limited to members and their guests only.

2. Distribute such a system, supply, or item to an organization that expects to gross the amount set forth in § 18.2-340.23 of the Code of Virginia or less in any 12-month period, providing that the amount of such purchase would not be reasonably expected to produce more than the amount set forth in § 18.2-340.23 of the Code of Virginia in gross sales. For each such organization, the network bingo provider shall maintain the name, address, and telephone number. The network bingo provider shall also obtain a written and signed statement from an officer or game manager of such organization confirming that gross receipts are expected to be the amount set forth in § 18.2-340.23 of the Code of Virginia or less. Such statements shall be dated and kept on file for a minimum of three years from the close of a fiscal year.

All such distributions shall be documented pursuant to subsection G of this section and reported to the department pursuant to subsection I of this section.

D. No network bingo provider, its agents, or its employees may be involved in the management, operation, or conduct of charitable gaming in the Commonwealth of Virginia. A network bingo provider, its agents, or its employees may call a network bingo game or distribute network bingo prizes associated with the network bingo provider's network bingo system. No member of a network bingo provider's immediate family or person residing in the same household as a network bingo provider may be involved in the management, operation, or conduct of charitable gaming of any customer of the network bingo provider in the Commonwealth of Virginia. No

network bingo provider, its agents, or its employees may participate in any charitable gaming of any customer of the network bingo provider in the Commonwealth of Virginia. For the purposes of this chapter, servicing of the network bingo system shall not be considered conduct or participation.

E. The department shall conduct a background investigation prior to the issuance of a permit to any network bingo provider. The investigation may include the following:

1. A search of criminal history records on all officers, directors, and owners; and

2. Verification of current compliance with Commonwealth of Virginia tax laws.

If the officers, directors, owners, or partners are domiciled outside of the Commonwealth of Virginia or have resided in the Commonwealth of Virginia for fewer than five years, a criminal history search conducted by the appropriate authority in any state in which the officers, directors, owners, or partners have resided during the previous five years shall be provided by the applicant.

F. Appropriate information and authorizations shall be provided to the department to verify information cited in subsection E of this section.

G. Network bingo providers shall document each sale of network bingo supplies, equipment, and other incidental items to perform network bingo to any person for use in the Commonwealth of Virginia on an invoice, which reflects the following:

1. Name, address, and organization number of the organization;

2. Date of sale, lease, or rental and location where the network bingo supplies, equipment, and other incidental items to perform network bingo is shipped or delivered if different from the billing address;

3. Form number, serial number, quantity, and purchase or rental price of the network bingo supplies, equipment, and other incidental items to perform network bingo;

4. Quantity of network bingo cards sold, the cost per card, and the selling price per card; and

5. Date of the network bingo game in which the qualified organization participated, the start time and end time of the game, and the number of balls called during the game.

H. Network bingo providers shall ensure that two copies of the detailed invoice are provided to the customer for the sale of network bingo supplies, equipment, and other incidental items to perform network bingo.

I. Each network bingo provider shall provide a report to the department by March 1 of each year on the sale of network bingo supplies, equipment, and other incidental items to perform network bingo for the fiscal year ending December 31 of the previous year to each organization in the Commonwealth of Virginia. This report shall be provided to the department via a department-approved electronic medium. The report shall include the name, address, and organization number of each organization and the following information for each sale or transaction:

1. Date of sale, lease, or rental and location where the network bingo supplies, equipment, and other incidental items to perform network bingo is shipped or delivered if different from the billing address;

2. Serial number, quantity, and purchase or rental price of the network bingo supplies, equipment, and other incidental items to perform network bingo;

3. Quantity of network bingo cards sold, the cost per card, and the selling price per card;

4. Date of the network bingo game in which qualified organizations participated, the start time and end time of the game, the number of balls called during the game, the total gross receipts for the game; and

5. Prize amount awarded to the winning player and which organization sold the winning network bingo card.

J. A network bingo provider shall maintain documentation on all deposits and disbursements into the prize pool for the network bingo game.

K. A network bingo provider, its agents, and its employees; members of a network bingo provider's immediate family; or persons residing in a network bingo provider's household shall not make any loan directly or indirectly to any organization or officer, director, game manager, or entity involved in the management, operation, or conduct of charitable gaming of the network bingo provider's customer located in the Commonwealth of Virginia.

L. A network bingo provider, its agent, or its employee shall not directly or indirectly provide a rebate, discount, or refund to any person other than an organization that purchases, rents, or leases network bingo supplies, equipment, and other incidental items to perform network bingo. All such transactions shall be recorded on the network bingo provider's account books.

M. A network bingo provider shall not rent, sell, or otherwise provide network bingo supplies, equipment, and other incidental items to perform network bingo unless the network bingo provider possesses a valid permit in the Commonwealth of Virginia.

N. A written agreement specifying the terms of lease or rental between the network bingo provider and the qualified organization shall be required for any equipment used to perform network bingo.

O. A network bingo provider shall record the following information on each winner of a network bingo game:

1. Name and address of the winner;

2. Name of the qualified organization that sold the winning network bingo card;

3. Date and time when the winning network bingo card was purchased by the winner; and

4. Location where the winning network bingo card was purchased by the winner.

Article 2
General Requirements

11VAC20-20-460. Approval of equipment used to perform network bingo.

A. The department shall set manufacturing and testing criteria for all equipment used to perform network bingo. Equipment used to perform network bingo shall not be sold, leased, or otherwise furnished to any person in the Commonwealth of Virginia for use as part of network bingo until an identical sample of equipment containing identical proprietary software has been certified by a testing facility that has been formally recognized by the department as a testing facility that upholds the standards of integrity established by the department. The testing facility must certify that the equipment conforms, at a minimum, to the requirements set forth in this chapter. Once the testing facility reports the test results to the department, the department will either approve or disapprove the equipment and inform the network provider of the results. If any such equipment does not meet the department's criteria, it shall be recalled and shall not be distributed in the Commonwealth of Virginia. The cost of testing shall be borne by the network provider of such equipment.

B. No network bingo provider shall knowingly sell or otherwise provide to an organization and no organization shall knowingly use equipment to perform network bingo unless it conforms to the requirements set forth in this chapter.

C. If a defect in any equipment used to perform network bingo is discovered by or reported to the department, the department shall notify the network bingo provider that is using the equipment containing the alleged defect. Should the department, in consultation with the network bingo provider, determine that a defect exists and should the department determine the defect affects game security or otherwise threatens public confidence in the game, the department may, with respect to any equipment used to perform network bingo still located within the Commonwealth of Virginia, require the network bingo provider to issue a recall of all affected equipment.

D. Department employees shall have the right to inspect all equipment used to perform network bingo. The department, at its discretion, may require additional testing of any equipment to perform network bingo at any time. Such additional testing shall be at the network provider's expense and shall be a condition of the continued use of such equipment.

E. Equipment used to perform network bingo shall have a permanently affixed identification badge that cannot be removed without leaving evidence of tampering. This badge shall be affixed to the exterior of the equipment and shall include the following information:

1. The manufacturer name;

2. A unique serial number;

3. The equipment model number;

4. The date of manufacture; and

5. Any other information required by the department.

Article 3
System Requirements

11VAC20-20-470. Location of equipment.

All equipment used to perform network bingo must be physically located within the boundaries of the Commonwealth of Virginia.

11VAC20-20-480. Communications and network requirements.

A. Where the network bingo system components are linked with one another in a network, communication protocols shall be used that ensure that erroneous data or signals will not adversely affect the operations of any such system components.

B. All data communication shall incorporate error detection and correction schemes to ensure the data is transmitted and received accurately.

C. Connections between all components of the network bingo system shall only be through the use of secure communication protocols that are designed to prevent unauthorized access or tampering, employing Advanced Encryption Standard (AES) or equivalent encryption.

D. A firewall or equivalent hardware device configured to block all inbound and outbound traffic that has not been expressly permitted and is not required for continued use of the network bingo system must exist between the network bingo system and any external point of access.

E. The minimum width (size) for encryption keys is 112 bits for symmetric algorithms and 1024 bits for public keys.

F. There must be a secure method implemented for changing the current encryption key set. It is not acceptable to only use the current key set to encrypt the next set.

G. There must be a secure method in place for the storage of encryption keys. Encryption keys must not be stored without being encrypted themselves.

H. If a wireless network is used, wireless products used in conjunction with any gaming system or system component must meet the following minimum standards:

1. Employ a security process that complies with the Federal Information Processing Standard 140-2 (FIPS 140-2); or

2. Employ an alternative method, as approved by the department.

11VAC20-20-490. Backup and recovery.

A. A network bingo system shall have a separate physical medium for securely storing data for the network bingo game, which shall be mirrored in real time by a backup medium.

B. All data required to be available or reported by this chapter must be retained for a period of not less than three years from the close of the fiscal year.

C. All storage of critical data shall utilize error checking and be stored on a nonvolatile physical medium.

D. The database shall be stored on redundant media so that no single failure of any portion of the system would result in the loss or corruption of data.

E. In the event of a catastrophic failure when the network bingo system cannot be restarted in any other way, it shall be possible to reload the network bingo system from the last viable backup point and fully recover the contents of that backup, to consist of at least the following information:

1. All significant events;

2. All accounting information;

3. Auditing information, including all sales and disbursements; and

4. Employee files with access levels.

11VAC20-20-500. Security requirements.

A. A network bingo system shall not permit the alteration of any accounting or significant event information that was communicated from a point-of-sale terminal without supervised access controls. In the event financial data is changed, an automated audit log must be capable of being produced to document the following:

1. Data element altered;

2. Data element value prior to alteration;

3. Data element value after alteration;

4. Time and date of alteration; and

5. Personnel that performed alteration.

B. A network bingo system must provide password security or other secure means of ensuring data integrity and enforcing user permissions for all system components through the following means:

1. All programs and data files must only be accessible via the entry of a password that will be known only to authorized personnel;

2. The network bingo system must have multiple security access levels to control and restrict different classes;

3. The network bingo system access accounts must be unique when assigned to the authorized personnel and shared accounts amongst authorized personnel must not be allowed;

4. The storage of passwords and personal identification numbers (PINs) must be in an encrypted, nonreversible form; and

5. A program or report must be available that will list all registered users on the network bingo system, including their privilege level.

C. All components of a network bingo system that allow access to users, other than the player, must have a password sign-on with at least two-level codes comprising the personal identification code and a personal password.

1. The personal identification code must have a length of at least six American Standard Code for Information Interchange (ASCII) characters; and

2. The personal password must have a minimum length of six alphanumeric characters, which should include at least one nonalphabetic character.

D. A network bingo system must have the capability to control potential data corruption that can be created by multiple simultaneous log-ons by system management personnel.

1. A network bingo system shall specify which of the access levels allow for multiple simultaneous sign-ons by different users and which of the access levels do not allow for multiple sign-ons, and if multiple sign-ons are possible, what restrictions, if any, exist; or

2. If a network bingo system does not provide adequate control, a comprehensive procedural control document must be drafted for the department's review and approval.

E. Network bingo system software components or modules shall be verifiable by a secure means at the system level. A network bingo system shall have the ability to allow for an independent integrity check of the components or modules from an outside source and an independent integrity check is required for all control programs that may affect the integrity of the network bingo system. This must be accomplished by being authenticated by a third-party device, which may be embedded within the network bingo system software or having an interface or procedure for a third-party application to authenticate the component. This integrity check will provide a means for field verification of the network bingo system components.

F. A network bingo system may be used to configure and perform security checks on the point-of-sale terminals, provided such functions do not affect the security, integrity, or

outcome of any game and meets the requirements set forth in this chapter regarding program storage devices.

11VAC20-20-510. Randomization.

A. As used in this section, unless the context requires a different meaning:

1. "Card position" means the first card dealt, second card dealt in sequential order.

2. "Number position" means the first number drawn in sequential order.

B. A network bingo system shall utilize randomizing procedures in the creation of network bingo cards.

C. Any random number generation, shuffling, or randomization of network bingo cards used in connection with a network bingo system must be by use of a random number generation application that has successfully passed standard tests for randomness and unpredictability including:

1. Each card position or number position satisfies the 99% confidence limit using the standard chi-squared analysis. "Chi-squared analysis" is the sum of the ratio of the square difference between the expected result and the observed result to the expected result.

2. Each card position or number position does not produce a significant statistic with regard to producing patterns of occurrences. Each card position or number position will be considered random if it meets the 99% confidence level with regard to the "run test" or any similar pattern testing statistic. The "run test" is a mathematical statistic that determines the existence of recurring patterns within a set of data.

3. Each card position or number position is independently chosen without regard to any other card or number drawn within that game play. This test is the "correlation test." Each pair of card positions or number positions is considered random if it meets the 99% confidence level using standard correlation analysis.

4. Each card position or number position is independently chosen without reference to the same card position or number position in the previous game. This test is the "serial correlation test." Each card position or number position is considered random if it meets the 99% confidence level using standard serial correlation analysis.

11VAC20-20-520. Point of sale terminal.

A. A network bingo system may utilize a point-of-sale terminal that is capable of facilitating the sale of network bingo cards. The point of sale may be entirely integrated into a network bingo system or exist as a separate entity.

B. Point-of-sale use is only permissible when the device is linked to an approved network bingo system.

C. If a network bingo system utilizes a point of sale, it shall be capable of printing a receipt for each sale or void. The receipt shall contain the following information:

1. Date and time of the transaction;

2. Dollar value of the transaction;

3. Validation number, if applicable;

4. Quantity of network bingo cards purchased;

5. Transaction number;

6. Point-of-sale identification number or name; and

7. Date and time when the network bingo game will begin.

D. The following point-of-sale report shall be generated on demand. Sales transaction history report shall show all sales and voids by session and include the following information:

1. Date and time of the transaction;

2. Dollar value of the transaction;

3. Quantity of network bingo cards sold;

4. Transaction number;

5. Point of sale identification number or name; and

6. Date and time of the network bingo game.

11VAC20-20-530. Game play requirements.

A. Any device that sells network bingo cards shall be clearly labeled so as to inform the public or game worker that no one younger than 18 years of age is allowed to play or redeem a network bingo card.

B. A network bingo provider shall have physical on-site independent supervision while the numbers for a network bingo game are called by a live caller. This independent supervision shall be unbiased in verifying the outcome of the network bingo game and uphold the department's objective of maintaining the highest level of integrity in charitable gaming. A written agreement specifying the terms of any arrangement between the entity or person providing the physical [~~on-site~~ on-site] independent supervision and the network bingo provider shall be required prior to any supervision being performed on the network bingo game. This written agreement shall be maintained by the network bingo provider for a minimum of three years from the close of the fiscal year, unless otherwise specified.

C. A network bingo provider shall ensure qualified organizations participating in its network bingo comply with § 18.2-340.28:1 F of the Code of Virginia.

D. A network bingo provider or the live caller shall announce the prize amount and the predetermined pattern to players immediately before the start of the network bingo game. Each location where a qualified organization is selling network bingo cards shall be equipped to visually display the broadcast

or signal of the numbers as they are being called by a live caller.

E. Gross receipts from the sale of network bingo cards shall be allocated in the following manner:

1. Up to 50% of such receipts to the organization selling network bingo cards;

2. Up to 50% of gross receipts to the prize pool; and

3. Any remaining amount to the network bingo provider.

However, if the prize pool reaches the maximum prize limitation, then the network bingo provider shall enable the organization to retain those gross receipts normally allocated to the prize pool.

F. All written agreements specifying the terms of any arrangement between the qualified organization and network bingo provider shall be maintained by both parties for a minimum of three years from the close of the fiscal year, unless otherwise specified.

G. Network bingo prizes must be claimed by the player within 30 days of winning the game and if not, the network bingo provider shall roll the unclaimed prize into the prize pool for the next network bingo game. The network bingo provider shall pay the prize by check to the winning player within 30 days. If the outcome of a network bingo game results in multiple winning players, then the prize amount shall be equally divided among them.

H. No single network bingo prize shall exceed the prize limitation set forth in § 18.2-340.28:1 H of the Code of Virginia.

Part VI
Administrative Process

11VAC20-20-600. Procedural rules for the conduct of fact-finding conferences and hearings.

A. As used in this part, "manufacturer" means a person or entity that assembles from raw materials or subparts a distributed pull-tab system.

B. Fact-finding conference; notification, appearance, and conduct.

1. Unless automatic revocation or immediate suspension is required by law, no permit to conduct charitable gaming, sell charitable gaming supplies, or distribute a distributed pull-tab system or no authorization to operate and conduct electronic gaming shall be denied, suspended, or revoked except upon notice stating the basis for such proposed action and the time and place for a fact-finding conference as set forth in § 2.2-4019 of the Administrative Process Act.

2. If a basis exists for a refusal to renew, suspend, or revoke a permit or authorization, the department shall notify by certified mail or by hand delivery the interested persons at the address of record maintained by the department.

3. Notification shall include the basis for the proposed action and afford interested persons the opportunity to present written and oral information to the department that may have a bearing on the proposed action at a fact-finding conference. If there is no withdrawal, a fact-finding conference shall be scheduled at the earliest mutually agreeable date, but no later than 60 days from the date of the notification. Organizations, suppliers, or manufacturers who wish to waive their right to a conference shall notify the department at least 14 days before the scheduled conference.

4. If after consideration of evidence presented during an informal fact-finding conference, a basis for action still exists, the interested persons shall be notified in writing within 60 days of the fact-finding conference via certified or hand-delivered mail of the decision and the right to a formal hearing. Parties to the conference may agree to extend the report deadline if more time is needed to consider relevant evidence.

C. Hearing; notification, appearance, and conduct.

1. If after a fact-finding conference, a sufficient basis still exists to deny, suspend, or revoke a permit or authorization, interested persons shall be notified by certified or hand-delivered mail of the proposed action and of the opportunity for a hearing on the proposed action. If an organization, supplier, or manufacturer desires to request a hearing, the organization, supplier, or manufacturer shall notify the department within 14 days of receipt of a report on the conference. Parties may enter into a consent agreement to settle the issues at any time prior to or subsequent to an informal fact-finding conference.

2. If an interested party or representative fails to appear at a hearing, the hearing officer may proceed in the interested party's or representative's absence and make a recommendation.

3. Oral and written arguments may be submitted to and limited by the hearing officer. Oral arguments shall be recorded in an appropriate manner.

D. Hearing location. Hearings before a hearing officer shall be held, insofar as practicable, in the county or city in which the organization, supplier, or manufacturer is located. If the parties agree, hearing officers may conduct hearings at locations convenient to the greatest number of persons or by telephone conference, video conference, or similar technology, in order to expedite the hearing process.

E. Hearing decisions.

1. Recommendations of the hearing officer shall be a part of the record and shall include a written statement of the hearing officer's findings of fact and recommendations as well as the reasons or basis for the recommendations.

Recommendations shall be based upon all the material issues of fact, law, or discretion presented on the record.

2. The department shall review the recommendation of the hearing officer and render a decision on the recommendation within 30 days of receipt. The decision shall cite the appropriate rule, relief, or denial thereof as to each issue.

F. Agency representation. The commissioner's designee may represent the department in an informal conference or at a hearing.

11VAC20-20-610. Reporting violations.

A. Unless otherwise required by law, the identity of any individual who provides information to the department or its agents regarding alleged violations shall be held in strict confidence.

B. Any officer, director, or game manager of a qualified organization or social organization or any officer or director of a supplier or manufacturer shall immediately report to the department any information pertaining to the suspected misappropriation or theft of funds or any other violation of the Charitable Gaming Law or regulations promulgated pursuant thereto.

C. Failure to report the information required by subsection B of this section may result in the denial, suspension, or revocation of a permit to conduct charitable gaming, permit to sell charitable gaming supplies, or authorization to operate and conduct electronic gaming.

D. Any officer, director, or game manager of a qualified organization or social organization involved in the management, operation, or conduct of charitable gaming or electronic gaming shall immediately notify the department upon being convicted of a felony or a crime involving fraud, theft, or financial crimes.

E. Any officer, director, partner, or owner of a supplier or manufacturer shall immediately notify the department upon being convicted or of pleading nolo contendere to a felony or a crime involving gambling or an action against any license or certificate held by the supplier or manufacturer in any state in the United States.

F. Failure to report information required by subsection D or E of this section by any officer, director, or game manager of a qualified organization or social organization or by any supplier or manufacturer may result in the denial, suspension, or revocation of a permit to conduct charitable gaming, permit to sell charitable gaming supplies, or authorization to operate and conduct electronic gaming.

G. Any officer, director, or game manager of a qualified organization involved in charitable gaming or electronic gaming shall immediately report to the department any change the IRS makes in the tax status of the organization, or if the organization is a chapter of a national organization covered by a group tax exempt determination, the tax status of the national organization.

H. All organizations regulated by the department shall display prominently a (i) poster advising the public of a telephone number where complaints relating to charitable gaming may be made and (ii) a poster that bears a toll-free telephone number for "Gamblers Anonymous" or other organization that provides assistance to compulsive gamblers. Such posters shall be in a format prescribed by the department.

NOTICE: The following forms used in administering the regulation have been filed by the agency. Amended or added forms are reflected in the listing and are published following the listing. Online users of this issue of the Virginia Register of Regulations may also click on the name to access a form. The forms are also available from the agency contact or may be viewed at the Office of Registrar of Regulations, 900 East Main Street, 11th Floor, Richmond, Virginia 23219.

FORMS (11VAC20-20)

GAME MANAGEMENT FORMS

Bingo Session Reconciliation Summary, Form 103 (rev. 8/2013)

Admission Sales Reconciliation - Paper, Form 104-A (rev. 8/2013)

Floor Sales Reconciliation - Paper, Form 104-B (rev. 12/2014)

Decision Bingo Reconciliation, Form 104-C (rev. 8/2013)

Raffle/Treasure Chest Sales Reconciliation - Bingo Session, Form 104-D (rev. 8/2013)

Paper Instant Bingo/Seal Cards/Pull-Tabs Reconciliation, Form 105 (rev. 8/2013)

Storeroom Inventory Issue - Paper, Form 106-A (rev. 8/2013)

Storeroom Inventory Issue - Instant Bingo/Seal Cards/Pull-Tabs, Form 106-B (rev. 8/2013)

List of Bingo Workers, Form 107 (rev. 8/2013)

Prize Receipt, Form 108 (rev. 8/2013)

Storeroom Inventory - Paper, Form 109-A (rev. 8/2013)

Storeroom Inventory - Instant Bingo/Seal Cards/Pull-Tabs, Form 109-B (rev. 8/2013)

Raffle Sales Reconciliation - Stand Alone Raffle, Form 110 (rev. 8/2013)

Instant Bingo/Seal Cars/Pull-tabs Reconciliation (Non-Bingo), Form 111 (rev. 8/2013)

Instant Bingo/Seal Cars/Pull-tabs Reconciliation Continuation (Non-Bingo), Form 111-A (rev. 8/2013)

Destruction of Unused Charitable Gaming Supplies, Form 112 (rev. 3/2014)

ORGANIZATION LICENSING FORMS

Charitable Gaming Permit Application - New Applicants Only, Form 201 - N (rev. 8/2021)

Gaming Personnel Information Update (rev. 7/2013)

Report of Game Termination (rev. 7/2013)

MANUFACTURER OF ELECTRONIC GAMING DEVICES, SUPPLIER, AND NETWORK BINGO PROVIDER LICENSING FORMS

Charitable Gaming Supplier Permit Application, Form 301 (rev. 2/2018)

Annual Supplier/Manufacturer Sales and Transaction Report, Form 302 (rev. 8/2013)

Certification of Non-Charitable Gaming/Gambling, Form 304 (rev. 7/2013)

Manufacturer of Electronic Pull-tab System Permit Application, Form 305 (rev. 10/2012)

Manufacturer of Electronic Pull-tab System Permit Application - Personal Information, Form 305A (rev. 10/2012)

Manufacturer of Electronic Pull-tab System Permit Renewal Application, Form 306 (rev. 10/2013)

Manufacturer of Electronic Pull-tab System Permit Renewal Application - Personal Information, Form 306A (rev. 10/2013)

Network Bingo Provider Permit Application, Form 307 (eff. 5/2014)

Network Bingo Provider Permit Application - Personal Information, Form 307A (eff. 5/2014)

BINGO MANAGER AND BINGO CALLER REGISTRATION FORMS

Charitable Gaming Bingo Caller Certificate of Registration Application, Form 401 (rev. 7/2018)

Charitable Gaming Bingo Manager Certificate of Registration Application, Form 402 (rev. 7/2018)

DOCUMENTS INCORPORATED BY REFERENCE (11VAC20-20)

IRS Publication 3079, Tax-Exempt Organizations and Gaming (rev. 6/2010).

Security Requirements for Cryptographic Modules, Federal Information Processing Standard, FIPS Pub 140-2 (rev. 12/2002).

VA.R. Doc. No. R23-7359; Filed February 3, 2023, 10:55 a.m.

TITLE 13. HOUSING

BOARD OF HOUSING AND COMMUNITY DEVELOPMENT

Proposed Regulation

REGISTRAR'S NOTICE: The Board of Housing and Community Development is claiming an exemption from Article 2 of the Administrative Process Act pursuant to § 2.2-4006 A 12 of the Code of Virginia, which excludes regulations adopted by the Board of Housing and Community Development pursuant to the Statewide Fire Prevention Code (§ 27-94 et seq.), the Industrialized Building Safety Law (§ 36-70 et seq.), the Uniform Statewide Building Code (§ 36-97 et seq.), and § 36-98.3 of the Code of Virginia, provided the board (i) provides a Notice of Intended Regulatory Action in conformance with the provisions of § 2.2-4007.01 of the Code of Virginia; (ii) publishes the proposed regulation and provides an opportunity for oral and written comments as provided in § 2.2-4007.03 of the Code of Virginia; and (iii) conducts at least one public hearing as provided in §§ 2.2-4009 and 36-100 of the Code of Virginia prior to the publishing of the proposed regulations. The board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Title of Regulation: **13VAC5-31. Virginia Amusement Device Regulations (amending 13VAC5-31-20, 13VAC5-31-30, 13VAC5-31-40).**

Statutory Authority: § 36-98.3 of the Code of Virginia.

Public Hearing Information:

May 8, 2023 - 10 a.m. - Virginia Housing Center, 4224 Cox Road, Glen Allen, VA 23060

Public hearing information: https://townhall.virginia.gov/L/viewmeeting.cfm?meetingid=37601

Public Comment Deadline: May 9, 2023.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090, TDD (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

Background: The Virginia Amusement Device Regulations (VADR) govern the construction and operation of amusement devices, which are by statutory definition devices or structures open to the public by which persons are conveyed or moved in an unusual manner for diversion and passenger tramways. The regulation is closely related to the Virginia Uniform Statewide Building Code (13VAC5-63) (USBC), and under state law the USBC applies to amusement devices to the extent that the VADR does not set out differing requirements. Both regulations use nationally recognized model building codes and standards to provide the technical requirements for the actual construction of the regulated buildings. Every three years, new editions of the model codes become available. At

that time, the Board of Housing and Community Development (BHCD) initiates a regulatory action to incorporate the newest editions of the model codes into the regulation and accepts proposals for changes to the regulation from stakeholders and the public. The Department of Housing and Community Development staff maintains mailing lists for workgroups involving different subject areas of regulation and conducts workgroup meetings attended by stakeholder groups and the public to develop consensus recommendations, when possible, concerning proposals that have been submitted. The department uses an online program incorporating the provisions of the regulation and the model codes and standards to facilitate the submittal of proposals. A public hearing is held during the workgroup meeting stage of the process and a comment period established. Once workgroup meetings are completed, the BHCD has a series of meetings to consider each proposal, and those proposals approved are incorporated into the proposed regulation. After the publishing of the proposed regulation, the BHCD establishes a comment period and holds an additional public hearing. The BHCD then meets to consider public comments to develop a final regulation to complete the regulatory process.

Summary:

The proposed amendments include (i) adding a definition for "serious injury or illness"; (ii) clarifying that nonmechanized playground equipment is not considered an amusement device; and (iii) updating the American Society for Testing and Materials (ASTM) standards incorporated by reference into the regulation to the most current editions.

13VAC5-31-20. Definitions.

A. The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Amusement device" means (i) a device or structure open to the public by which persons are conveyed or moved in an unusual manner for diversion, but excluding snow tubing parks and rides, ski terrain parks, ski slopes, and ski trails, and (ii) passenger tramways. For the purpose of this definition, the phrase "open to the public" means that the public has full access to a device or structure at an event, irrespective of whether a fee is charged. The use of devices or structures at private events is not considered to be open to the public.

"Bungee cord" means the elastic rope to which the jumper is attached ~~which~~ that lengthens and shortens to produce a bouncing action.

"Carabineer" means a shaped metal device with a gate used to connect sections of a bungee cord, jump rigging, equipment, or safety gear.

"Certificate of inspection" means the certificate or sticker for amusement devices distributed by DHCD.

"DHCD" means the Virginia Department of Housing and Community Development.

"Gravity ride" means a ride that is installed on an inclined surface, ~~which~~ that depends on gravity for its operation to convey a passenger from the top of the incline to the bottom, and ~~which~~ that conveys a passenger in or on a carrier tube, bag, bathing suit, or clothes.

"Ground operator" means a person who assists the jump master to prepare a jumper for jumping.

"Harness" means an assembly to be worn by a bungee jumper to be attached to a bungee cord. It is designed to prevent the wearer from becoming detached from the bungee system.

"Institutional trampoline" means a trampoline intended for use in a commercial or institutional facility.

"Jump master" means a person who has responsibility for the bungee jumper and who takes the jumper through the final stages to the actual jump.

"Jump zone" means the space bounded by the maximum designed movements of the bungee jumper.

"Jumper" means the person who departs from a height attached to a bungee system.

"Landing area" means the surface area of ground or water directly under the jump zone, the area where the lowering device moves the bungee jumper to be landed away from the jump space, and the area covered by the movement of the lowering device.

"Local building department" means the agency ~~or agencies~~ of the governing body of any city, county, or town in this Commonwealth charged with the enforcement of the USBC.

"Operating manual" means the document that contains the procedures and forms for the operation of bungee jumping equipment and activity at a site.

"Passenger tramway" means a device used to transport passengers uphill, and suspended in the air by the use of steel cables, chains or belts, or ropes, and usually supported by trestles or towers with one or more spans.

"Platform" means the equipment attached to the structure from which the bungee jumper departs.

"Private inspector" means a person performing inspections who is independent of the company, individual, or organization owning, operating, or having any vested interest in an amusement device being inspected.

"Serious injury or illness" means a personal injury or personal illness that results in death; dismemberment; significant disfigurement; permanent loss of the use of a body organ, member, function, or system; a compound fracture; or other significant injury or illness that requires immediate admission

and overnight hospitalization and observation by a licensed physician.

"Small mechanical ride" means an amusement device, other than an inflatable amusement device, where (i) the assembly time for the device is two hours or less, (ii) the revolutions per minute of any rotation of the components of the device is not greater than seven, (iii) the device has a footprint of less than 500 square feet, and (iv) the device does not invert a patron or lift a patron more than three feet in the air, measured from the ground to the bottom of the patron's feet when the device is operating.

"Trampoline court" means a defined area comprising one or more institutional trampolines or a series of institutional trampolines.

"Ultimate tensile strength" means the greatest amount of load applied to a bungee cord prior to failure.

"USBC" means the Virginia Uniform Statewide Building Code (13VAC5-63).

B. Words and terms used in this chapter ~~which~~ that are defined in the USBC shall have the meaning ascribed to them in that regulation unless the context clearly indicates otherwise.

C. Words and terms used in this chapter ~~which~~ that are defined in the standards incorporated by reference in this chapter shall have the meaning ascribed to them in those standards unless the context clearly indicates otherwise.

13VAC5-31-30. Devices covered and exempt.

A. The following devices, identified by name or description, when open to the public shall be considered amusement devices subject to this chapter. The list is intended only to clarify questionable devices, while the definition of an "amusement device" in 13VAC5-31-20 is generally used to determine the applicability of this chapter.

1. Inflatable amusement devices;

2. Zip lines; and

3. Trampoline courts.

B. The following equipment or devices shall not be considered amusement devices subject to this chapter:

1. Nonmechanized playground or recreational equipment such as swing sets, sliding boards, climbing bars, jungle gyms, skateboard ramps, and similar equipment ~~where no admission fee is charged for its use or for admittance to areas where the equipment is located~~;

2. Coin-operated rides designed to accommodate three or less passengers;

3. Water slides or similar equipment used in community association, community club, or community organization swimming pools;

4. Mechanical bulls or similar devices;

5. Devices known as mall trains, shopping mall trains, or electric trackless trains for malls; and

6. Devices known as water walking balls, euro bubbles, or similar devices.

13VAC5-31-40. Incorporated standards.

A. The following standards are hereby incorporated by reference for use as part of this chapter:

1. American National Standards Institute (ANSI) Standard B77.1-2017 for the regulation of passenger tramways; and

2. American Society for Testing and Materials (ASTM) Standard Nos. ~~F747-15~~ F747-21a, ~~F770-18~~ F770-21a, ~~F1159-16~~ F1159-16e1, ~~F1193-18~~ F1193-18a, F1957-99 (2017), F2007-18, ~~F2137-18~~ F2137-19, ~~F2291-19~~ F2291-21, ~~F2374-19~~ F2374-21a, F2375-09 (2017), ~~F2376-17a~~ F2376-21a, ~~F2460-11~~ F2460-19, ~~F2461-18~~ F2461-20a, ~~F2959-18~~ F2959-21, F2960-16, ~~F2970-17~~ F2970-20, ~~F2974-19~~ F2974-20, and F3054-18 for the regulation of amusement devices.

The standards referenced ~~above~~ in subsection A of this section may be procured from:

ANSI 25 W 43rd Street New York, NY 10036	ASTM 100 Barr Harbor Dr. West Conshohocken, PA 19428- 2959

B. The provisions of this chapter govern where they are in conflict with any provisions of the standards incorporated by reference in this chapter.

C. The following requirements supplement the provisions of the ASTM standards incorporated by reference in this chapter:

1. The operator of an amusement device shall be at least 16 years of age, except when the person is under the supervision of a parent or guardian and engaged in activities determined not to be hazardous by the Commissioner of the Virginia Department of Labor and Industry;

2. The amusement device shall be attended by an operator at all times during operation except that (i) one operator is permitted to operate two or more amusement devices provided they are within the sight of the operator and operated by a common control panel or station and (ii) one operator is permitted to operate two small mechanical rides with separate controls provided the distance between controls is no more than 35 feet and the controls are equipped with a positive pressure switch; and

3. The operator of an amusement device shall not be (i) under the influence of any drugs ~~which~~ that may affect the operator's judgment or ability to assure the safety of the public or (ii) under the influence of alcohol.

D. Where an amusement device was manufactured under previous editions of the standards incorporated by reference in this chapter, the previous editions shall apply to the extent that they are different from the current standards.

DOCUMENTS INCORPORATED BY REFERENCE (13VAC5-31)

ANSI B77.1-2017, Passenger Ropeways – Aerial Tramways, Aerial Lifts, Surface Lifts, Tows and Conveyors – Safety Standard, American National Standards Institute (ANSI), 25 West 43rd Street, 4th Floor, New York, NY 10036 (http://www.ansi.org/)

American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959; (http://www.astm.org/):

~~ASTM F747-15, Standard Terminology Relating to Amusement Rides and Devices~~

~~ASTM F770-18, Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices~~

~~ASTM F1159-16, Standard Practice for Design of Amusement Rides and Devices that are Outside the Purview of Other F24 Design Standards~~

~~ASTM F1193-18, Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices~~

ASTM F747-21a, Standard Terminology Relating to Amusement Rides and Devices

ASTM F770-21a, Standard Practice for Ownership, Operation, Maintenance, and Inspection of Amusement Rides and Devices

ASTM F1159-16e1, Standard Practice for Design of Amusement Rides and Devices that are Outside the Purview of Other F24 Design Standards

ASTM F1193-18a, Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices

ASTM F1957-99 (2017), Standard Test Method for Composite Foam Hardness-Durometer Hardness

ASTM F2007-18, Standard Practice for Classification, Design, Manufacture, and Operation of Concession Go-Karts and Facilities

~~ASTM F2137-18, Standard Practice for Measuring the Dynamic Characteristics of Amusement Rides and Devices~~

~~ASTM F2291-19, Standard Practice for Design of Amusement Rides and Devices~~

~~ASTM F2374-17, Standard Practice for Design, Manufacture, Operation, and Maintenance of Inflatable Amusement Devices~~

ASTM F2137-19, Standard Practice for Measuring the Dynamic Characteristics of Amusement Rides and Devices

ASTM F2291-21, Standard Practice for Design of Amusement Rides and Devices

ASTM F2374-21a, Standard Practice for Design, Manufacture, Operation, and Maintenance of Inflatable Amusement Devices

ASTM F2375-09 (2017), Standard Practice for Design, Manufacture, Installation and Testing of Climbing Nets and Netting/Mesh used in Amusement Rides, Devices, Play Areas and Attractions

~~ASTM F2376-17a, Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems~~

~~ASTM F2460-11, Standard Practice for Special Requirements for Bumper Boats~~

~~ASTM F2461-18, Standard Practice for Manufacture, Construction, Operation and Maintenance of Aquatic Play Equipment~~

~~ASTM F2959-18, Standard Practice for Aerial Adventure Courses~~

ASTM F2376-21a, Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems

ASTM F2460-19, Standard Practice for Special Requirements for Bumper Boats

ASTM F2461-20a, Standard Practice for Manufacture, Construction, Operation and Maintenance of Aquatic Play Equipment

ASTM F2959-21, Standard Practice for Aerial Adventure Courses

ASTM F2960-16, Standard Practice for Permanent Amusement Railway Ride Tracks and Related Devices

~~ASTM F2974-19, Standard Guide for Auditing Amusement Rides and Devices~~

~~ASTM F2970-17, Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts~~

ASTM F2974-20, Standard Guide for Auditing Amusement Rides and Devices

ASTM F2970-20, Standard Practice for Design, Manufacture, Installation, Operation, Maintenance, Inspection and Major Modification of Trampoline Courts

ASTM F3054-18, Standard Practice for Operations of Amusement Railway Rides, Devices, and Facilities

VA.R. Doc. No. R22-7019; Filed January 27, 2023, 11:44 a.m.

Proposed Regulation

REGISTRAR'S NOTICE: The Board of Housing and Community Development is claiming an exemption from Article 2 of the Administrative Process Act pursuant to § 2.2-4006 A 12 of the Code of Virginia, which excludes regulations adopted by the Board of Housing and Community Development pursuant to the Statewide Fire Prevention Code (§ 27-94 et seq.), the Industrialized Building Safety Law (§ 36-70 et seq.), the Uniform Statewide Building Code (§ 36-97 et seq.), and § 36-98.3 of the Code of Virginia, provided the board (i) provides a Notice of Intended Regulatory Action in conformance with the provisions of § 2.2-4007.01 of the Code of Virginia, (ii) publishes the proposed regulation and provides an opportunity for oral and written comments as provided in § 2.2-4007.03 of the Code of Virginia, and (iii) conducts at least one public hearing as provided in §§ 2.2-4009 and 36-100 of the Code of Virginia prior to the publishing of the proposed regulations. The board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Titles of Regulations: **13VAC5-51. Virginia Statewide Fire Prevention Code (repealing 13VAC5-51-11 through 13VAC5-51-155).**

13VAC5-52. Virginia Statewide Fire Prevention Code (adding 13VAC5-52-10 through 13VAC5-52-680).

Statutory Authority: § 27-97 of the Code of Virginia.

Public Hearing Information:

May 8, 2023 - 10 a.m. - Virginia Housing Center, 4224 Cox Road, Glen Allen, VA 23060

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Background: The Statewide Fire Prevention Code (SFPC) is a regulation governing the maintenance of the fire protection aspects of existing structures and operational functions relating to fire safety wherever located, including the regulation of the use of explosives and blasting and fireworks displays. The SFPC uses a nationally recognized model code produced by the International Code Council as the basis for the technical provisions of the regulation. Every three years, new editions of the model codes become available. At that time, the Board of Housing and Community Development (BHCD) initiates a regulatory action to incorporate the newest editions of the model codes into the regulation and accepts proposals for changes to the regulation from stakeholders and the public. The Department of Housing and Community Development staff maintains mailing lists for workgroups involving different subject areas of regulation and conducts workgroup meetings attended by stakeholder groups and the public to develop consensus recommendations, when possible, concerning proposals that have been submitted. The department uses an online program incorporating the provisions of the regulation and the model codes and standards to facilitate the submittal of proposals. A public hearing is held during the workgroup meeting stage of the process and a comment period established. Once workgroup meetings are completed, the BHCD has a series of meetings to consider each proposal, and those proposals approved are incorporated into the proposed regulation. After the publishing of the proposed regulation, the BHCD establishes a comment period and holds an additional public hearing. The BHCD then meets to consider public comments to develop a final regulation to complete the regulatory process.

Different this code development cycle is the repeal and replacement of existing regulation, 13VAC5-51, with the new regulation, 13VAC5-52. The repeal and replace of the Virginia Statewide Fire Prevention Code does not affect substance and is required to accommodate the technical needs of the fire code within the Virginia Administrative Code. Book 3, available on the Department of Housing and Community Development website, and the following summary provide details of the substantive changes.

Summary:

The group of substantive proposed changes to the Virginia Statewide Fire Prevention Code

(i) in 13VAC5-52-70, adds an operational permit for energy storage systems to Table 107.2; adds an operational permit for Industrial Additive Manufacturing to Table 107.2; and updates the state annual compliance inspection fees to correlate transfer of oversight for family day homes from the Department of Social Services to the Department of Education;

(ii) in 13VAC5-52-110, allows the option of transmitting a notice of violation via email if the responsible party is not on site;

(iii) in 13VAC5-52-180, requires electrical equipment, wiring, and systems to be operated and maintained in accordance with the section and the applicable building code; requires electrical equipment, wiring, devices, and appliances to be listed and labeled in accordance with the section and the applicable National Fire Protection Association (NFPA) 70 provisions; prohibits the use of electrical wiring, devices, equipment, and appliances that are modified or damaged and constitute an electrical shock or fire hazard, unless repaired or replaced in accordance with the applicable building code; and deletes International Fire Code (IFC) 2021 Section 610.1.1;

(iv) in 13VAC5-52-200, changes the name of the section to "Natural Decorative Vegetation in Buildings" and requires play structures to be maintained in accordance with the applicable building code;

(v) in 3VAC5-52-210, requires walls, ceilings, and ceiling tiles to be maintained in place where such components are required for proper operation of the fire protection system; requires fire protection systems subject to an annual inspection or test to be marked with an inspection tag or sticker indicating latest inspection status; requires the maintenance of fire protection and life safety systems in accordance with the original installation standards for that system; requires the existing fire protection and life safety systems to be maintained in operation during alterations of buildings or structures; and allows the signal produced at the fire alarm control unit to be a supervisory signal where an emergency alarm system is interfaced with a building's fire alarm system;

(vi) in 13VAC5-52-220, requires the means of egress to be maintained in accordance with the applicable building code and this chapter; requires egress courts serving as an exit discharge component in the means of egress system to be maintained in accordance with the applicable building code; and requires emergency supplemental hardware to be maintained in accordance with the conditions of their approval;

(vii) in 13VAC5-52-240, requires electrical wiring and equipment used in connection with energy systems to be maintained in accordance with this chapter, Section 603 of the IFC, and the applicable building code; reinstates IFC Section 1201.3 with minor amendments to account for the "applicable building code" and to correct the cited reference; requires the maintenance of standby power for mechanical exhaust ventilation systems, irrelevant of whether it was required by the applicable building code or provided voluntarily; and removes construction related provisions related to energy storage systems, only retaining maintenance and operational requirements;

(viii) in 13VAC5-52-270, requires openings in enclosed equipment and conveyors to be maintained such that they allow access to all parts of the equipment and conveyors to permit inspection, cleaning, maintenance, and the effective use of portable fire extinguishers or hose streams; prohibits the operation of electrical motors and components in dust-laden airstream, unless listed for locations in accordance with the applicable building code; and provides the minimum required separation between portable spark-producing devices and areas requiring classified electrical equipment;

(ix) in 13VAC5-52-360, adds new table to be used for determining the allowable location for LP-gas containers and tanks utilized in conjunction with tents and membrane structures;

(x) in 13VAC5-52-380, removes unenforceable construction provisions from Chapter 33 "Fire Safety During Construction" and correlates with the Virginia Construction Code and Virginia Existing Building Code;

(xi) in 13VAC5-52-440, requires systems and equipment used for the extraction of oils from plant material to be approved, listed, and labeled in accordance with the applicable building code and be operated and maintained in accordance with their listings and the manufacturer's instructions;

(xii) in 13VAC5-52-450, provides requirements applicable to the storage of distilled spirits and wines;

(xiii) in 13VAC5-52-480, expands the list of exemptions from compliance with the hazardous material provisions and increases the maximum allowable quantity per control area for Group M and Group S occupancies in buildings equipped throughout with an NFPA 13 sprinkler system;

(xiv) in 13VAC5-52-530, adds a new subsection and referenced standard for the sale or retail display of permissible fireworks;

(xv) in 13VAC5-52-540, revises the scoping provisions of the section to clarify that all alcohol-based hand rub dispensers, not just wall-mounted ones with Class I or Class II liquids are regulated under the SFPC and clarifies that normal and emergency vents, serving underground tanks (UT) temporarily out of service and UT out of service for 90 days must remain open and be maintained; and

(xvi) updates standards incorporated into the regulation by reference.

Chapter 52
Virginia Statewide Fire Prevention Code

Part I
General Regulations

13VAC5-52-10. Chapter 1 Administration; Section 101 Scope.

A. 101.1 Title. These regulations shall be known as the Virginia Statewide Fire Prevention Code (SFPC), hereinafter referred to as "this code" or "SFPC." The term "chapter" means a chapter in the SFPC. The SFPC was cooperatively developed by the Virginia Fire Services Board and the Virginia Board of Housing and Community Development.

B. 101.2 Scope. The SFPC prescribes regulations affecting or relating to maintenance of structures, processes, and premises and safeguards to be complied with for the protection of life and property from the hazards of fire or explosion and for the handling, storage, and use of fireworks, explosives, or blasting agents and provides for the administration and enforcement of such regulations. The SFPC also establishes regulations for obtaining permits for the manufacturing, storage, handling, use, or sales of explosives. Inspections under the SFPC are a governmental responsibility.

101.2.1 Provisions of this code shall not require modifications or installation of construction elements or systems required or regulated by the applicable building

code. This shall be understood to not require installation if no system, appliance, device, etc. was previously installed under the applicable building code.

101.2.2 Where this code requires maintenance or a system, structure, appliance, etc. to be maintained it shall not be construed to be a requirement for installation through this code.

C. 101.3 Purpose. The purposes of the SFPC are to provide for statewide standards to safeguard life and property from the hazards of fire or explosion arising from the improper maintenance of life safety and fire prevention and protection materials, devices, systems, and structures and from the unsafe storage, handling, and use of substances, materials, and devices, including explosives and blasting agents, wherever located.

D. 101.4 Validity. To the extent that any provisions of the SFPC or the referenced codes or standards are not within the scope of this chapter, those provisions are considered to be invalid. When any provision of the SFPC is found to be in conflict with the USBC, OSHA, or statute, that provision of the SFPC shall become invalid.

E. 101.5 Local regulations. Any local governing body may adopt fire prevention regulations that are more restrictive or more extensive in scope than the SFPC, provided such regulations do not affect the manner of construction or materials to be used in the erection, alteration, repair, or use of a building or structure as provided in the USBC, including the voluntary installation of smoke alarms and regulation and inspections thereof in commercial buildings where such smoke alarms are not required under the provisions of the SFPC.

F. 101.6 Nonresidential farm structures. Farm structures not used for residential purposes are exempt from the SFPC except when the inspection and enforcement provisions of the code are exercised by a warrant issued under the authority of §§ 27-98.2 through 27-98.5 of the Code of Virginia.

13VAC5-52-20. Section 102 Applicability.

A. 102.1 General. The provisions of the SFPC shall apply to all matters affecting or relating to structures, processes, and premises as set forth in Section 101. The SFPC shall supersede any fire prevention regulations previously adopted by a local government or other political subdivision.

B. 102.1.1 Change of occupancy. No change of occupancy shall be made in any building or structure unless such building or structure is made to comply with the requirements of the USBC as determined by the building official.

C. 102.2 Application to pre-1973 buildings and structures. Buildings and structures constructed prior to the USBC (1973) shall comply with the maintenance requirements of the SFPC to the extent that equipment, systems, devices, and safeguards that were provided and approved when constructed shall be maintained. Such buildings and structures, if subject to the state fire and public building regulations (Virginia Public Building Safety Regulations, codified as VR 394-01-05) in effect prior to March 31, 1986, shall also be maintained in accordance with those regulations.

D. 102.3 Application to post-1973 buildings and structures. Buildings and structures constructed under any edition of the USBC shall comply with the maintenance requirements of the SFPC to the extent that equipment, systems, devices, and safeguards that were provided and approved when constructed shall be maintained.

E. 102.4 Referenced codes and standards. The codes and standards referenced in the IFC shall be those listed in Chapter 80 and considered part of the requirements of the SFPC to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply.

F. 102.5 State-owned buildings and structures. The SFPC shall be applicable to all state-owned buildings and structures in the manner and extent described in § 27-99 of the Code of Virginia, and the State Fire Marshal shall have the authority to enforce this code in state-owned buildings and structures as is prescribed in §§ 27-98 and 27-99 of the Code of Virginia.

G. 102.6 Relationship to USBC. In accordance with §§ 27-34.4, 36-105.1, and 36-119.1 of the Code of Virginia, the USBC does not supersede the provisions of this code that prescribe standards to be complied with in existing buildings and structures, provided that this code shall not impose requirements that are more restrictive than those of the USBC under which the buildings or structures were constructed. Subsequent alteration, enlargement, rehabilitation, repair, or conversion of the occupancy classification of such buildings and structures shall be subject to the construction and rehabilitation provisions of the USBC. Inspection of buildings other than state-owned buildings under construction and the review and approval of building plans for these structures for enforcement of the USBC shall be the sole responsibility of the appropriate local building inspectors.

Upon completion of such structures, responsibility for fire safety protection shall pass to the local fire marshal or official designated by the locality to enforce this code in those localities that enforce the SFPC or to the State Fire Marshal in those localities that do not enforce this code.

H. 102.7 Inspections for USBC requirements. The fire official shall require that existing structures subject to the requirements of the applicable retrofitting provisions relating to the fire protection equipment and system requirements of the USBC, Part II, Existing Buildings, Section 1101, comply with the provisions located therein.

13VAC5-52-30. Section 103 Incorporation by reference.

A. 103.1 General. The following document is adopted and incorporated by reference to be an enforceable part of the SFPC:

The International Fire Code -- 2021 Edition, hereinafter referred to as "IFC," published by the International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070, 1-888 422-7233.

B. 103.1.1 Deletion. Delete IFC Chapter 1.

C. 103.1.2 Appendices. The appendices in the IFC are not considered part of the IFC for the purposes of Section 103.1.

Note: Section 101.5 references authority contained in the Code of Virginia for local fire prevention regulations that may be evaluated by localities to determine whether provisions in the IFC appendices may be considered for local fire prevention regulations.

D. 103.2 Amendments. All requirements of the referenced codes and standards that relate to fees, nonoperational permits not specifically required by Section 107.2, unsafe notices, disputes, condemnation, inspections, scope of enforcement, and all other procedural and administrative matters are deleted and replaced by the provisions of Chapter 1 of the SFPC.

Exception: The scope of referenced codes and standards referenced by the SFPC that relate to the maintenance, testing, and inspection requirements or limitations shall be enforceable.

E. 103.2.1 Other amendments. The SFPC contains provisions adopted by the Virginia Board of Housing and Community Development (BHCD), some of which delete, change, or amend provisions of the IFC and referenced standards. Where conflicts occur between such changed provisions and the unchanged provisions of the IFC and referenced standards, the provisions changed by the BHCD shall govern.

Note: The IFC and its referenced standards contain some areas of regulation outside of the scope of the SFPC, as established by the BHCD and under state law. Where conflicts have been readily noted, changes have been made to the IFC and its referenced standards to bring it within the scope of authority; however, in some areas, judgment will have to be made as to whether the provisions of the IFC and its referenced standards are fully applicable.

F. 103.3 International Fire Code. Retroactive fire protection system requirements contained in the IFC shall not be enforced unless specified by the USBC.

13VAC5-52-40. Section 104 Enforcement.

A. 104.1 Local enforcement. Any local government may enforce the SFPC following official action by such body. The official action shall (i) require compliance with the provisions of the SFPC in its entirety or with respect only to those provisions of the SFPC relating to open burning, fire lanes, fireworks, and hazardous materials and (ii) assign enforcement responsibility to any local agency of its choice. Any local governing body may establish such procedures or requirements as may be necessary for the administration and enforcement of this code. If a local governing body elects to enforce only those provisions of the SFPC relating to open burning, it may do so in all or in any designated geographic areas of its jurisdiction. The terms "enforcing agency" and "fire official" are intended to apply to any agency to which responsibility for enforcement of the SFPC has been assigned. The terms "building official" or "building department" are intended to apply only to the local building official or local building department.

B. 104.1.1 Enforcement of fireworks provisions by law-enforcement officers. In accordance with § 27-100.1 of the Code of Virginia, law-enforcement officers who are otherwise authorized to enforce certain provisions of this code shall not be subject to the certification requirements of Section 105.2 or 105.3.2.

C. 104.2 State enforcement. In accordance with § 27-98 of the Code of Virginia, the State Fire Marshal shall also have the authority, in cooperation with any local governing body, to enforce the SFPC. The State Fire Marshal shall also have authority to enforce the SFPC in those jurisdictions in which the local governments do not enforce the SFPC and may establish such procedures or requirements as may be necessary for the administration and enforcement of the SFPC in such jurisdictions.

D. 104.3 State structures. Every agency, commission, or institution of this Commonwealth, including all institutions of higher education, shall permit, at all reasonable hours, the fire official reasonable access to existing structures or a structure under construction or renovation for the purpose of performing an informational and advisory fire safety inspection. The fire official is permitted to submit, subsequent to performing such inspection, the fire official's findings and recommendations, including a list of corrective actions necessary to ensure that such structure is reasonably safe from the hazards of fire, to the appropriate official of such agency, commission, or institution and to the State Fire Marshal. Such agency, commission, or institution shall notify, within 60 days of receipt of such findings and recommendations, the State Fire Marshal and the fire official of the corrective measures taken to eliminate the hazards reported by the fire official. The State Fire Marshal shall have the same power in the enforcement of this section as is provided for in § 27-98 of the Code of Virginia. The State Fire Marshal may enter into an agreement as is provided for in § 9.1-208 of the Code of Virginia with any local enforcement agency that enforces the SFPC to enforce this section and to take immediate enforcement action upon verification of a complaint of an imminent hazard, such as a chained or blocked exit door, improper storage of flammable liquids, use of decorative materials, and overcrowding.

13VAC5-52-50. Section 105 Enforcing agency.

A. 105.1 Fire official. Each enforcing agency shall have an executive official in charge, hereinafter referred to as the "fire official."

Note: Fire officials are subject to sanctions in accordance with the Virginia Certification Standards (13VAC5-21).

B. 105.1.1 Appointment. The fire official shall be appointed in a manner selected by the local government having jurisdiction. After permanent appointment, the fire official shall not be removed from office except for cause after having been afforded a full opportunity to be heard on specific and relevant charges by and before the appointing authority.

C. 105.1.2 Notification of appointment. The appointing authority of the local governing body shall notify the Department of Housing and Community Development (DHCD) and the State Fire Marshal's Office (SFMO) within 30 days of the appointment or release of the permanent or acting fire official.

D. 105.1.3 Qualifications. The fire official shall have at least five years of fire-related experience as a firefighter, fire officer, licensed professional engineer or architect, fire or building inspector, contractor, or superintendent of fire protection-related or building construction or at least five years of fire-related experience after obtaining a degree in architecture or engineering, with at least three years in responsible charge of work. Any combination of education and experience that would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The fire official shall have general knowledge of sound engineering practice with respect to the design and construction of structures, the basic principles of fire prevention and protection, the accepted requirements for means of egress, and the installation of elevators and other service equipment necessary for the health, safety, and general welfare of the occupants and the public. The local governing body may establish additional qualification requirements.

E. 105.2 Certification. The permanent or acting fire official shall obtain certification from the BHCD in accordance with the Virginia Certification Standards (13VAC5-21) within one year after permanent or acting appointment.

Exception: A fire official appointed prior to April 1, 1994, continuously employed by the same local governing body as the fire official shall comply with required DHCD training under the Virginia Certification Standards (13VAC5-21).

F. 105.2.1 Noncertified fire official. Except for a fire official exempt from certification under the exception to Section 105.2, any acting or permanent fire official who is not certified as a fire official in accordance with the Virginia Certification Standards (13VAC5-21) shall attend the core module of the Virginia Building Code Academy or an equivalent course in an individual or regional code academy accredited by DHCD within 180 days of appointment. This requirement is in addition to meeting the certification requirement in Section 105.2.

G. 105.3 Technical assistant. The local governing body or its designee may utilize one or more technical assistants who, in the absence of the fire official, shall have the powers and perform the duties of the fire official.

Note: Technical assistants are subject to sanctions in accordance with the Virginia Certification Standards (13VAC5-21).

H. 105.3.1 Notification. The fire official shall notify the DHCD within 60 days of the employment, contract, or termination of all technical assistants for enforcement of the SFPC.

I. 105.3.2 Qualifications. A technical assistant shall have at least three years of experience and general knowledge in at least one of the following areas: fire protection, firefighting, electrical, building, plumbing, or mechanical trades. Any combination of education and experience that would confer equivalent knowledge and ability shall be deemed to satisfy this requirement. The locality may establish additional qualification requirements.

J. 105.3.3 Certification. All technical assistants employed by or under contract to an enforcing agency for enforcing the SFPC shall be certified in the appropriate subject area in accordance with the Virginia Certification Standards (13VAC5-21) within one and one-half years after permanent or acting appointment. When required by a locality to have two or more certifications, the remaining certifications shall be obtained within three years from the date of such requirement.

Exception: Any technical assistant continuously employed by or continuously under contract to the same enforcing agency for enforcing the SFPC since before April 1, 1994, shall be exempt from the provisions of this section; however, such exempt technical assistant shall comply with required DHCD training under Virginia Certification Standards (13VAC5-21).

Note: Continuing education and periodic training requirements for DHCD certifications are set out in the Virginia Certification Standards (13VAC5-21).

K. 105.4 Control of conflict of interest. The standards of conduct for officials and employees of the enforcing agency shall be in accordance with the provisions of the State and Local Government Conflict of Interests Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2 of the Code of Virginia.

13VAC5-52-60. Section 106 Duties and powers of the fire official.

A. 106.1 General. The fire official shall enforce the provisions of the SFPC as provided herein and as interpreted by the State Review Board in accordance with § 36-118 of the Code of Virginia.

B. 106.2 Delegation of duties and powers. The fire official may delegate duties and powers subject to any limitations imposed by the local governing body. The fire official shall be responsible that any powers and duties delegated are carried out in accordance with this code.

C. 106.3 Inspections. The fire official is authorized to conduct such inspections as are deemed necessary to determine the extent of compliance with the provisions of this code and to approve reports of inspection by approved agencies or individuals in accordance with the fire official's written policy. All reports of such inspections by approved agencies or individuals shall be prepared and submitted in writing for review and approval. Inspection reports shall be certified by a responsible officer of such approved agency or by the responsible individual. The fire official is authorized to engage such expert opinion as deemed necessary to report upon unusual, detailed, or complex technical issues in accordance with local policies.

D. 106.3.1 Observations. When, during an inspection, the fire official or an authorized representative observes an apparent or actual violation of another law, ordinance, or code not within the official's authority to enforce, such official shall report the findings to the official having jurisdiction in order that such official may institute the necessary measures.

E. 106.4 Alternatives. The SFPC provisions are not intended to prevent the use of any safeguards used to protect life and property from the hazards of fire or explosion that are not specifically prescribed by the SFPC, provided that such alternative safeguards comply with the intent of the SFPC. The alternative safeguard offered shall be, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability, and safety.

F. 106.5 Modifications. The fire official may grant modifications to any provision of the SFPC upon application by the owner or the owner's agent provided the spirit and intent of the SFPC are observed and public health, welfare, and safety are assured.

Note: The current editions of many nationally recognized model codes and standards are referenced by the SFPC. Future amendments to such codes and standards do not automatically become part of the SFPC; however, the fire official should consider such amendments in deciding whether a modification request should be granted.

G. 106.5.1 Supporting data. The fire official shall require that sufficient technical data be submitted to substantiate the proposed use of any alternative. If it is determined that the evidence presented is satisfactory proof of performance for the use intended, the fire official shall approve the use of such alternative subject to the requirements of this code. The fire official may require and consider a statement from a professional engineer, architect, or other competent person as to the equivalency of the proposed modification.

H. 106.5.2 Decision. The application for modification and the final decision of the fire official shall be in writing and shall be recorded in the permanent records of the local enforcing agency.

I. 106.6 Notices and orders. The fire official shall issue all necessary notices or orders to ensure compliance with the SFPC.

J. 106.7 Department records. The fire official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records or disposed of in accordance with General Schedule Number Seventeen available from The Library of Virginia.

13VAC5-52-70. Section 107 Permits and fees.

A. 107.1 Prior notification. The fire official may require notification prior to (i) activities involving the handling, storage, or use of substances, materials, or devices regulated by the SFPC; (ii) conducting processes that produce conditions hazardous to life or property; or (iii) establishing a place of assembly.

B. 107.2 Permits required. Operational permits may be required by the fire official as permitted under the SFPC in accordance with Table 107.2, except that the fire official shall require permits for the manufacturing, storage, handling, use, and sale of explosives. In accordance with Section 5601.2.3.1, an application for a permit to manufacture, store, handle, use, or sell explosives shall only be made by a designated individual.

Exception: Such permits shall not be required for the storage of explosives or blasting agents by the Virginia Department of State Police, provided notification to the fire official is made annually by the Chief Arson Investigator listing all storage locations.

C. Add Table 107.2 as follows:

Table 107.2
OPERATIONAL PERMIT REQUIREMENTS (to be filled in by local jurisdiction)

Description	Permit Required (yes or no)	Permit Fee	Inspection Fee
Aerosol products. An operational permit is required to manufacture, store, or handle an aggregate quantity of Level 2 or Level 3 aerosol products in excess of 500 pounds (227 kg) net weight.			
Amusement buildings. An operational permit is required to operate a special amusement building.			
Aviation facilities. An operational permit is required to use a Group H or Group S occupancy for aircraft servicing or repair and aircraft fuel-servicing vehicles. Additional permits required by other sections of this code include hot work, hazardous materials, and flammable or combustible finishes.			
Carnivals and fairs. An operational permit is required to conduct a carnival or fair.			
Cellulose nitrate film. An operational permit is required to store, handle, or use cellulose nitrate film in a Group A occupancy.			
Combustible dust-producing operations. An operational permit is required to operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices, or sugar or other operations producing combustible dusts as defined in Chapter 2.			
Combustible fibers. An operational permit is required for the storage and handling of combustible fibers in quantities greater than 100 cubic feet (2.8 m^3). Exception: An operational permit is not required for agricultural storage.			
Commercial cooking. An operational permit is required for the operation of commercial cooking appliances in occupancies other than assembly occupancies or dwellings.			
Compressed gas. An operational permit is required for the storage, use, or handling at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed in this table. Exception: Vehicles equipped for and using compressed gas as a fuel for propelling the vehicle.			
Permit Amounts for Compressed Gases			
Type of Gas: Amount (cubic feet at NTP)			
Corrosive: 200			
Flammable (except cryogenic fluids and liquefied petroleum gases): 200			
Highly toxic: Any Amount			

Inert and simple asphyxiant	6,000			
Oxidizing (including oxygen)	504			
Pyrophoric	Any Amount			
Toxic	Any Amount			
For SI: 1 cubic foot = 0.02832 m^3.				
Covered and open mall buildings. An operational permit is required for: 1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods, and similar items in the mall. 2. The display of liquid-fired or gas-fired equipment in the mall. 3. The use of open-flame or flame-producing equipment in the mall.				
Cryogenic fluids. An operational permit is required to produce, store, transport onsite, use, handle, or dispense cryogenic fluids in excess of the amounts listed in this table. Exception: Operational permits are not required for vehicles equipped for and using cryogenic fluids as a fuel for propelling the vehicle or for refrigerating the lading.				
Permit Amounts for Cryogenic Fluids				
Type of Cryogenic Fluid	Inside Building (gallons)	Outside Building (gallons)		
Flammable	More than 1	60		
Inert	60	500		
Oxidizing (includes oxygen)	10	50		
Physical or health hazard not indicated above	Any Amount	Any Amount		
For SI: 1 gallon = 3.785 L.				
Cutting and welding. An operational permit is required to conduct cutting or welding operations within the jurisdiction.				
Dry cleaning plants. An operational permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.				
Energy storage systems. An operational permit is required for stationary and mobile energy storage systems regulated by Section 1207.				
Exhibits and trade shows. An operational permit is required to operate exhibits and trade shows.				
Explosives, fireworks, and pyrotechnics. An operational permit is required for the storage, handling, sale, or use of any quantity of explosive, explosive materials, fireworks, pyrotechnic special effects, or pyrotechnic special effects material within the scope of Chapter 56.				

Exception: Storage in Group R-3 or R-5 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale, and in accordance with the quantity limitations and conditions set forth in Section 5601.1, Exceptions 4 and 12.			
Explosives, restricted manufacture. An operational permit is required for the restricted manufacture of explosives within the scope of Chapter 56.			
Explosives, unrestricted manufacture. An operational permit is required for the unrestricted manufacture of explosives within the scope of Chapter 56.			
Fire hydrants and valves. An operational permit is required to use or operate fire hydrants or valves intended for fire suppression purposes that are installed on water systems and accessible to a fire apparatus access road that is open to or generally used by the public. Exception: An operational permit is not required for authorized employees of the water company that supplies the system or the fire department to use or operate fire hydrants or valves.			
Flammable and combustible liquids. An operational permit is required: 1. To use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This requirement shall neither apply to the offsite transportation in pipelines regulated by the U.S. Department of Transportation (DOTn) nor to piping systems. 2. To store, handle, or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:			
2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the fire official, would cause an unsafe condition. 2.2. The storage or use of paints, oils, varnishes, or similar flammable mixtures when such liquids are stored for maintenance, painting, or similar purposes for a period of not more than 30 days.			

3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment. 4. To remove Class I or Class II liquids from an underground storage tank used for fueling motor vehicles by any means other than the approved, stationary onsite pumps normally used for dispensing purposes. 5. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries, and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed, or used. 6. To install, alter, remove, abandon, place temporarily out of service (for more than 90 days), or otherwise dispose of an underground, protected aboveground, or aboveground flammable or combustible liquid tank. 7. To change the type of contents stored in a flammable or combustible liquid tank to a material that poses a greater hazard than that for which the tank was designed and constructed. 8. To manufacture, process, blend, or refine flammable or combustible liquids.				
Floor finishing. An operational permit is required for floor finishing or surfacing operations exceeding 350 square feet (33 m^2) using Class I or Class II liquids.				
Fruit and crop ripening. An operational permit is required to operate a fruit- ripening or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.				
Fumigation, thermal, and insecticidal fogging. An operational permit is required to operate a business of fumigation, thermal, or insecticidal fogging and to maintain a room, vault, or chamber in which a toxic or flammable fumigant is used.				
Hazardous materials. An operational permit is required to store, transport onsite, dispense, use, or handle hazardous materials in excess of the amounts listed in this table.				
Permit Amounts for Hazardous Materials				
Type of Material	Amount			
Combustible liquids	See flammable and combustible liquids			
Corrosive materials				
Gases	See compressed gases			
Liquids	55 gallons			
Solids	1000 pounds			
Explosive materials	See explosives			
Flammable materials				
Gases	See compressed gases			

Liquids	See flammable and combustible liquids			
Solids	100 pounds			
Highly toxic materials				
Gases	See compressed gases			
Liquids	Any amount			
Solids	Any amount			
Oxidizing materials				
Gases	See compressed gases			
Liquids				
Class 4	Any amount			
Class 3	1 gallon [a]			
Class 2	10 gallons			
Class 1	55 gallons			
Solids				
Class 4	Any amount			
Class 3	10 pounds [b]			
Class 2	100 pounds			
Class 1	500 pounds			
Organic peroxides				
Liquids				
Class I	Any amount			
Class II	Any amount			
Class III	1 gallon			
Class IV	2 gallons			
Class V	No permit required			
Solids				
Class I	Any amount			
Class II	Any amount			
Class III	10 pounds			
Class IV	20 pounds			
Class V	No permit required			
Pyrophoric materials				
Gases	See compressed gases			
Liquids	Any amount			

Solids	Any amount			
Toxic materials				
Gases	See compressed gases			
Liquids	10 gallons			
Solids	100 pounds			
Unstable (reactive) materials				
Liquids				
Class 4	Any amount			
Class 3	Any amount			
Class 2	5 gallons			
Class 1	10 gallons			
Solids				
Class 4	Any amount			
Class 3	Any amount			
Class 2	50 pounds			
Class 1	100 pounds			
Water reactive materials				
Liquids				
Class 3	Any amount			
Class 2	5 gallons			
Class 1	55 gallons			
Solids				
Class 3	Any amount			
Class 2	50 pounds			
Class 1	500 pounds			
For SI: 1 gallon = 3.785 L, 1 pound = 0.454 kg. a. 20 gallons when Section 5003.1.1 applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 20 gallons or less. b. 200 pounds when Section 5003.1.1 applies and hazard identification signs in accordance with Section 5003.5 are provided for quantities of 200 pounds or less.				
HPM facilities. An operational permit is required to store, handle, or use hazardous production materials.				
High piled storage. An operational permit is required to use a building or portion thereof as a high-piled storage area exceeding 500 square feet (46 m^2).				

Hot work operations. An operational permit is required for hot work, including: 1. Public exhibitions and demonstrations where hot work is conducted. 2. Use of portable hot work equipment inside a structure. Exception: Work that is conducted under a construction permit. 3. Fixed-site hot work equipment such as welding booths. 4. Hot work conducted within a hazardous fire area. 5. Application of roof coverings with the use of an open-flame device. 6. When approved, the fire official shall issue a permit to carry out a Hot Work Program. This program allows approved personnel to regulate their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in this chapter. These permits shall be issued only to their employees or to hot work operations under their supervision.			
Industrial additive manufacturing: An operational permit is required to conduct additive manufacturing operations regulated by Section 320.3.			
Industrial ovens. An operational permit is required for operation of industrial ovens regulated by Chapter 30.			
Lumber yards and woodworking plants. An operational permit is required for the storage or processing of lumber exceeding 100,000 board feet (8,333 ft^3) (236 m^3).			
Liquid-fueled or gas-fueled vehicles or equipment in assembly buildings. An operational permit is required to display, operate or demonstrate liquid-fueled or gas-fueled vehicles or equipment in assembly buildings.			
LP-gas. An operational permit is required for: 1. Storage and use of LP-gas. Exception: An operational permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893 L), serving occupancies in Group R-3. 2. Operation of cargo tankers that transport LP-gas.			
Magnesium. An operational permit is required to melt, cast, heat treat, or grind more than 10 pounds (4.54 kg) of magnesium.			
Miscellaneous combustible storage. An operational permit is required to store in any building or upon any premises in excess of 2,500 cubic feet (71 m^3) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork, or similar combustible material.			
Mobile food preparation vehicles. A permit is required for mobile food preparation vehicles equipped with appliances that produce smoke or grease laden vapors. Exception: Recreational vehicles used for private recreation.			

Open burning. An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to. Exception: Recreational fires.			
Open flames and candles. An operational permit is required to use open flames or candles in connection with assembly areas or dining areas of restaurants or drinking establishments.			
Open flames and torches. An operational permit is required to remove paint with a torch or to use a torch or open-flame device in a wildfire risk area.			
Organic coatings. An operational permit is required for any organic-coating manufacturing operation producing more than 1 gallon (4 L) of an organic coating in one day.			
Places of assembly. An operational permit is required to operate a place of assembly.			
Plant extraction systems. An operational permit is required to use plant extraction systems.			
Private fire hydrants. An operational permit is required for the removal from service, use, or operation of private fire hydrants. Exception: An operational permit is not required for private industry with trained maintenance personnel, private fire brigade, or fire departments to maintain, test, and use private hydrants.			
Pyrotechnic special effects material. An operational permit is required for use and handling of pyrotechnic special effects material.			
Pyroxylin plastics. An operational permit is required for storage or handling of more than 25 pounds (11 kg) of cellulose nitrate (pyroxylin) plastics and for the assembly or manufacture of articles involving pyroxylin plastics.			
Refrigeration equipment. An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.			
Repair garages and service stations. An operational permit is required for operation of repair garages and automotive, marine and fleet service stations.			
Rooftop heliports. An operational permit is required for the operation of a rooftop heliport.			
State-regulated care facilities. An operational permit is required for the operation of a state-regulated care facility where inspection by the fire official is required by state licensing regulations.			
Spraying or dipping. An operational permit is required to conduct a spraying or dipping operation utilizing flammable or combustible liquids or the application of combustible powders regulated by Chapter 24.			

Storage of scrap tires and tire byproducts. An operational permit is required to establish, conduct, or maintain storage of scrap tires and tire byproducts that exceeds 2,500 cubic feet (71 m^3) of total volume of scrap tires and for indoor storage of tires and tire byproducts.			
Temporary membrane structures and tents. An operational permit is required to operate an air-supported temporary membrane structure or a tent. Exceptions: 1. Tents used exclusively for recreational camping purposes. 2. Tents and air-supported structures that cover an area of 900 square feet (84 m^2) or less, including all connecting areas or spaces with a common means of egress or entrance and with an occupant load of 50 or fewer persons.			
Tire-rebuilding plants. An operational permit is required for the operation and maintenance of a tire-rebuilding plant.			
Waste handling. An operational permit is required for the operation of wrecking yards, junk yards, and waste material-handling facilities.			
Wood products. An operational permit is required to store chips, hogged material, lumber, or plywood in excess of 200 cubic feet (6 m^3).			

D. 107.3 Application for permit. Application for a permit shall be made on forms prescribed by the fire official.

E. 107.4 Issuance of permits. Before a permit is issued, the fire official shall make such inspections or tests as are necessary to ensure that the use and activities for which application is made comply with the provisions of this code.

F. 107.5 Conditions of permit. A permit shall constitute permission to store or handle materials or to conduct processes in accordance with the SFPC and shall not be construed as authority to omit or amend any of the provisions of this code. Permits shall remain in effect until revoked or for such period as specified on the permit. Permits are not transferable.

G. 107.6 Annual. The enforcing agency may issue annual permits for the manufacturing, storage, handling, use, or sales of explosives to any state regulated public utility.

H. 107.7 Approved plans. Plans approved by the fire official are approved with the intent that they comply in all respects to this code. Any omissions or errors on the plans do not relieve the applicant of complying with all applicable requirements of this code.

I. 107.8 Posting. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire official.

J. 107.9 Suspension of permit. A permit shall become invalid if the authorized activity is not commenced within six months after issuance of the permit or if the authorized activity is suspended or abandoned for a period of six months after the time of commencement.

K. 107.10 Local fees. In accordance with § 27-98 of the Code of Virginia, fees may be levied by the local governing body in order to defray the cost of enforcement and appeals under the SFPC. However, for the city of Chesapeake no fee charged for the inspection of any place of religious worship designated as Assembly Group A-3 shall exceed $50. For purposes of this section, "defray the cost" may include the fair and reasonable costs incurred for such enforcement during normal business hours but shall not include overtime costs, unless conducted outside of the normal working hours established by the locality. A schedule of such costs shall be adopted by the local governing body in a local ordinance. A locality shall not charge an overtime rate for inspections conducted during the normal business hours established by the locality. Nothing herein shall be construed to prohibit a private entity from conducting such inspections, provided the private entity has been approved to perform such inspections in accordance with the written policy of the fire official for the locality.

L. 107.11 State Fire Marshal's Office permit fees for explosives, blasting agents, theatrical flame effects, and fireworks. Complete permit applications shall be submitted to

and received by the State Fire Marshal's Office not less than 15 days prior to the planned use or event. A $500 expedited handling fee will be assessed on all permit applications submitted less than 15 days prior to the planned use or event. Inspection fees will be assessed at a rate of $60 per staff member per hour during normal business hours (Monday through Friday, 8:30 a.m. to 4:30 p.m.) and at a rate of $90 per hour at all other times (nights, weekends, holidays). State Fire Marshal's Office permit fees shall be as follows:

1. Storage of explosives and blasting agents, 12-month permit $250 first magazine, plus $150 per each additional magazine on the same site.

2. Use of explosives and blasting agents, nonfixed site, six-month permit $250 per site, plus inspection fees.

3. Use of explosives and blasting agents, fixed site, 12-month permit $250 per site.

4. Sale of explosives and blasting agents, 12-month permit $250 per site.

5. Manufacture explosives (unrestricted), blasting agents, and fireworks, 12-month permit $250 per site.

6. Manufacture explosives (restricted), 12-month permit $20 per site.

7. Fireworks display in or on state-owned property $300 plus inspection fees.

8. Pyrotechnics or proximate audience displays in or on state-owned property $300 plus inspection fees.

9. Flame effects in or on state-owned property $300 plus inspection fees.

10. Flame effects incidental to a permitted pyrotechnics display $150 (flame effects must be individual or group effects that are attended and manually controlled).

Exception: Permit fees shall not be required for the storage of explosives or blasting agents by state and local law-enforcement and fire agencies.

M. 107.12 State annual compliance inspection fees. Fees for compliance inspections performed by the State Fire Marshal's Office shall be as follows:

1. Nightclubs.

1.1. $350 for occupant load of 100 or less.

1.2. $450 for occupant load of 101 to 200.

1.3. $500 for occupant load of 201 to 300.

1.4. $500 plus $50 for each 100 occupants where occupant loads exceed 300.

2. Private college dormitories with or without assembly areas. If containing assembly areas, such assembly areas are not included in the computation of square footage.

2.1. $150 for 3500 square feet or less.

2.2. $200 for greater than 3500 square feet up to 7000 square feet.

2.3. $250 for greater than 7000 square feet up to 10,000 square feet.

2.4. $250 plus $50 for each additional 3000 square feet where square footage exceeds 10,000.

3. Assembly areas that are part of private college dormitories.

3.1. $50 for 10,000 square feet or less provided the assembly area is within or attached to a dormitory building.

3.2. $100 for greater than 10,000 square feet up to 25,000 square feet provided the assembly area is within or attached to a dormitory building, such as gymnasiums, auditoriums, or cafeterias.

3.3. $100 for up to 25,000 square feet provided the assembly area is in a separate or separate buildings, such as gymnasiums, auditoriums, or cafeterias.

3.4. $150 for greater than 25,000 square feet for assembly areas within or attached to a dormitory building or in a separate building, such as gymnasiums, auditoriums, or cafeterias.

4. Hospitals.

4.1. $300 for 1 to 50 beds.

4.2. $400 for 51 to 100 beds.

4.3. $500 for 101 to 150 beds.

4.4. $600 for 151 to 200 beds.

4.5. $600 plus $100 for each additional 100 beds where the number of beds exceeds 200.

5. State-regulated care facilities:

5.1 Facilities licensed by the Virginia Department of Social Services based on licensed capacity as follows:

5.1.1. $50 for 1 to 8.

5.1.2. $75 for 9 to 20.

5.1.3. $100 for 21 to 50.

5.1.4. $200 for 51 to 100.

5.1.5. $300 for 101 to 150.

5.1.6. $400 for 151 to 200.

5.1.7. $500 for 201 or more.

Exception: Annual compliance inspection fees for any building or group of buildings on the same site may not exceed $2500.

5.2 Family Day Homes licensed by the Department of Education based on licensed capacity as follows:

5.2.1. $50 for 1 to 8.

5.2.2. $75 for 9 to 20.

5.2.3. $100 for 21 to 50.

5.2.4. $200 for 51 to 100.

5.2.5. $300 for 101 to 150.

5.2.6. $400 for 151 to 200.

5.2.7. $500 for 201 or more.

Exception: Annual compliance inspection fees for any building or group of buildings on the same site may not exceed $2500.

6. Registered complaints.

6.1. No charge for first visit (initial complaint), and if violations are found.

6.2. $51 per hour for each State Fire Marshal's office staff for all subsequent visits.

7. Bonfires (small and large) on state-owned property.

7.1. For a small bonfire pile with a total fuel area more than three feet in diameter and more than two feet in height, but not more than nine feet in diameter and not more than six feet in height, the permit fee is $50. If an application for a bonfire permit is received by the State Fire Marshal's Office less than 15 days prior to the planned event, the permit fee shall be $100. If an application for a bonfire permit is received by the State Fire Marshal's Office less than seven days prior to the planned event, the permit fee shall be $150.

7.2. For a large bonfire pile with a total fuel area more than nine feet in diameter and more than six feet in height, the permit fee is $150. If an application for a bonfire permit is received by the State Fire Marshal's Office less than 15 days prior to the planned event, the permit fee shall be $300. If an application for a bonfire permit is received by the State Fire Marshal's Office less than seven days prior to the planned event, the permit fee shall be $450.

N. 107.13 Fee schedule. The local governing body may establish a fee schedule. The schedule shall incorporate unit rates, which may be based on square footage, cubic footage, estimated cost of inspection, or other appropriate criteria.

O. 107.14 Payment of fees. A permit shall not be issued until the designated fees have been paid.

Exception: The fire official may authorize delayed payment of fees.

P. 107.14.1 State Fire Marshal's Office certification and permit fees not refundable. No refund of any part of the amount paid as a permit or certification fee will be made where the applicant or permit or certification holder, for any reason, discontinued an activity, changed conditions, or changed circumstances for which the permit or certification was issued. However, the permit or certification fee submitted with an application will be refunded if the permit or certification is canceled, revoked, or suspended subsequent to having been issued through administrative error or if a permit being applied for is to be obtained from a locally appointed fire official.

13VAC5-52-80. Section 108 Operational permits.

A. 108.1 General. Operational permits shall be in accordance with Section 108. The fire official may require notification prior to (i) activities involving the handling, storage, or use of substances, materials, or devices regulated by the SFPC; (ii) conducting processes that produce conditions hazardous to life or property; or (iii) establishing a place of assembly.

B. 108.1.1 Permits required. Operational permits may be required by the fire official in accordance with Table 107.2. The fire official shall require operational permits for the manufacturing, storage, handling, use, and sale of explosives. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire official.

Exceptions:

1. Operational permits will not be required by the State Fire Marshal except for the manufacturing, storage, handling, use, and sale of explosives in localities not enforcing the SFPC.

2. Operational permits will not be required for the manufacturing, storage, handling, or use of explosives or blasting agents by the Virginia Department of State Police provided notification to the fire official is made annually by the Chief Arson Investigator listing all storage locations.

C. 108.1.2 Duration of operational permits. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Section 108.1.1 for either:

1. A prescribed period.

2. Until renewed, suspended, or revoked.

D. 108.1.3 Operational permits for the same location. When more than one operational permit is required for the same location, the fire official is authorized to consolidate such permits into a single permit provided that each provision is listed in the permit.

E. 108.2 Application. Application for an operational permit required by this code shall be made to the fire official in such form and detail as prescribed by the fire official. Applications for permits shall be accompanied by such plans as prescribed by the fire official.

F. 108.2.1 Refusal to issue permit. If the application for an operational permit describes a use that does not conform to the requirements of this code and other pertinent laws and ordinances, the fire official shall not issue a permit but shall return the application to the applicant with the refusal to issue such permit. Such refusal shall, when requested, be in writing and shall contain the reasons for refusal.

G. 108.2.2 Inspection authorized. Before a new operational permit is approved, the fire official is authorized to inspect the

receptacles, vehicles, buildings, devices, premises, storage spaces, or areas to be used to determine compliance with this code or any operational constraints required.

H. 108.2.3 Time limitation of application. An application for an operational permit for any proposed work or operation shall be deemed to have been abandoned six months after the date of filing, unless such application has been diligently prosecuted or a permit shall have been issued; except that the fire official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each if there is reasonable cause.

I. 108.2.4 Action on application. The fire official shall examine or cause to be examined applications for operational permits and amendments thereto within a reasonable time after filing. If the application does not conform to the requirements of pertinent laws, the fire official shall reject such application in writing, stating the reasons. If the fire official is satisfied that the proposed work or operation conforms to the requirements of this code and laws and ordinances applicable thereto, the fire official shall issue a permit as soon as practicable.

J. 108.3 Conditions of a permit. An operational permit shall constitute permission to maintain, store, or handle materials or to conduct processes in accordance with the SFPC and shall not be construed as authority to omit or amend any of the provisions of this code.

Note: The building official issues permits to install equipment utilized in connection with such activities or to install or modify any fire protection system or equipment or any other construction, equipment installation, or modification.

K. 108.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed, or revoked for such a period of time as specified in the permit. Permits are not transferable, and any change in occupancy, operation, tenancy, or ownership shall require that a new permit be issued.

L. 108.3.2 Extensions. A permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit when work is unable to be commenced within the time required by this section for good and satisfactory reasons. The fire official is authorized to grant, in writing, one or more extensions of the time period of a permit for periods of not more than 90 days each. Such extensions shall be requested by the permit holder in writing and justifiable cause demonstrated.

M. 108.3.3 Annual. The enforcing agency may issue annual operational permits for the manufacturing, storage, handling, use, or sales of explosives to any state regulated public utility.

N. 108.3.4 Suspension of permit. An operational permit shall become invalid if the authorized activity is not commenced within six months after issuance of the permit or if the authorized activity is suspended or abandoned for a period of six months after the time of commencement.

O. 108.3.5 Posting. Issued operational permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire official.

P. 108.3.6 Compliance with code. The issuance or granting of an operational permit shall not be construed to be a permit for or an approval of any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Operational permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on other data shall not prevent the fire official from requiring the correction of errors in the provided documents and other data. Any addition to or alteration of approved provided documents shall be approved in advance by the fire official, as evidenced by the issuance of a new or amended permit.

Q. 108.3.7 Information on the permit. The fire official shall issue all operational permits required by this code on an approved form furnished for that purpose. The operational permit shall contain a general description of the operation or occupancy and its location and any other information required by the fire official. Issued permits shall bear the original or electronic signature of the fire official or other designee approved by the fire official.

R. 108.4 Revocation. The fire official is authorized to revoke an operational permit issued under the provisions of this code when it is found by inspection or otherwise that there has been a false statement or misrepresentation as to the material facts in the application or documents on which the permit or approval was based including any one of the following:

1. The permit is used for a location or establishment other than that for which it was issued.

2. The permit is used for a condition or activity other than that listed in the permit.

3. Conditions and limitations set forth in the permit have been violated.

4. Inclusion of any false statements or misrepresentations as to a material fact in the application for permit or plans submitted or a condition of the permit.

5. The permit is used by a different person or firm than the person or firm for which it was issued.

6. The permittee failed, refused, or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided therein.

7. The permit was issued in error or in violation of an ordinance, a regulation, or this code.

13VAC5-52-90. Section 109 Inspection.

A. 109.1 Inspection. The fire official may inspect all structures and premises for the purposes of ascertaining and causing to be corrected any conditions liable to cause fire,

contribute to the spread of fire, interfere with firefighting operations, or endanger life or for any violations of the provisions or intent of the SFPC.

Exception: Single-family dwellings and dwelling units in two-family and multiple-family dwellings and farm structures shall be exempt from routine inspections. This exemption shall not preclude the fire official from conducting routine inspections in Group R-3 or Group R-5 occupancies operating as a commercial bed and breakfast as outlined in Section 310.2 of the USBC or inspecting under § 27-98.2 of the Code of Virginia for hazardous conditions relating to explosives, flammable and combustible conditions, and hazardous materials.

B. 109.1.1 Right to entry. The fire official may enter any structure or premises at any reasonable time to inspect subject to constitutional restrictions on unreasonable searches and seizures. If entry is refused or not obtained, the fire official may pursue recourse as provided by law.

Note: Specific authorization and procedures for inspections and issuing warrants are set out in §§ 27-98.1 through 27-98.5 of the Code of Virginia and shall be taken into consideration.

C. 109.1.2 Credentials. The fire official and technical assistants shall carry proper credentials of office when inspecting in the performance of their duties under the SFPC.

D. 109.2 Coordinated inspections. The fire official shall coordinate inspections and administrative orders with any other state and local agencies having related inspection authority and shall coordinate those inspections required by the USBC for new construction when involving provisions of the amended IFC so that the owners and occupants will not be subjected to numerous inspections or conflicting orders.

Note: The USBC requires the building official to coordinate such inspections with the fire official.

E. 109.3 Other inspections. In accordance with § 9.1-207 of the Code of Virginia, the State Fire Marshal, upon presenting proper credentials, shall make annual inspections for hazards incident to fire in all (i) residential care facilities operated by any state agency; (ii) assisted living facilities licensed or subject to licensure pursuant to Chapter 18 (§ 63.2-1800 et seq.) of Title 63.2 of the Code of Virginia that are not inspected by a local fire marshal; (iii) student residence facilities owned or operated by the public institutions of higher education in the Commonwealth; and (iv) public schools in the Commonwealth that are not inspected by a local fire marshal. In the event that any such facility or residence is found to be nonconforming to the SFPC, the State Fire Marshal or local fire marshal may petition any court of competent jurisdiction for the issuance of an injunction.

13VAC5-52-100. Section 110 Unsafe conditions.

A. 110.1 General. The fire official shall order the following dangerous or hazardous conditions or materials found to be noncompliant with provisions found within the subsequent sections of this code to be removed or remedied in accordance with the SFPC:

1. Dangerous conditions that are liable to cause or contribute to the spread of fire in or on such premises, building, or structure, or to endanger the occupants thereof.

2. Conditions that would interfere with the efficiency and use of any fire protection equipment.

3. Obstructions to or on fire escapes, stairs, passageways, doors, or windows that are liable to interfere with the egress of occupants or the operation of the fire department in case of fire.

4. Accumulations of dust or waste material in air conditioning or ventilating systems or grease in kitchen or other exhaust ducts.

5. Accumulations of grease on kitchen cooking equipment or oil, grease, or dirt upon, under, or around any mechanical equipment.

6. Accumulations of rubbish, waste, paper, boxes, shavings, or other combustible materials or excessive storage of any combustible material.

7. Hazardous conditions arising from defective or improperly used or installed electrical wiring, equipment, or appliances.

8. Hazardous conditions arising from defective or improperly used or installed equipment for handling or using combustible, explosive, or otherwise hazardous materials.

9. Dangerous or unlawful amounts of combustible, explosive, or otherwise hazardous materials.

10. All equipment, materials, processes, or operations that are in violation of the provisions and intent of this code.

B. 110.2 Maintenance. The owner shall be responsible for the safe and proper maintenance of any structure, premises, or lot. In all structures, the fire protection equipment, means of egress, alarms, devices, and safeguards shall be maintained in a safe and proper operating condition as required by the SFPC and applicable referenced standards.

C. 110.3 Occupant responsibility. If a building occupant creates conditions in violation of this code by virtue of storage, handling, and use of substances, materials, devices, and appliances, such occupant shall be held responsible for the abatement of such hazardous conditions.

D. 110.4 Unsafe structures. All structures that are or shall hereafter become unsafe or deficient in adequate exit facilities, that constitute a fire hazard, are otherwise dangerous to human life or the public welfare, or by reason of illegal or improper use, occupancy, or maintenance or that have sustained structural damage by reason of fire, explosion, or natural disaster shall be deemed unsafe structures. A vacant structure

or portion of a structure unguarded or open at door or window shall be deemed a fire hazard and unsafe within the meaning of this code. Unsafe structures in violation of the applicable building code shall be reported to the building official or building maintenance official who shall take appropriate action under the provisions of the USBC to secure abatement. Subsequently, the fire official may request the legal counsel of the local governing body to institute the appropriate proceedings for an injunction against the continued use and occupancy of the structure until such time as conditions have been remedied.

E. 110.5 Evacuation. When, in the fire official's opinion, there is actual and potential danger to the occupants or those in the proximity of any structure or premises because of unsafe structural conditions; inadequacy of any means of egress, the presence of explosives, explosive fumes, or vapors; or the presence of toxic fumes, gases, or materials, the fire official may order the immediate evacuation of the structure or premises. All notified occupants shall immediately leave the structure or premises, and no person shall enter until authorized by the fire official.

F. 110.6 Unlawful continuance. Any person who refuses to leave, interferes with the evacuation of other occupants, or continues any operation after having been given an evacuation order shall be in violation of this code.

Exception: Any person performing work directed by the fire official to be performed to remove an alleged violation or unsafe condition.

13VAC5-52-110. Section 111 Violations.

A. 111.1 Notice. When the fire official discovers an alleged violation of a provision of the SFPC or other codes or ordinances under the fire official's jurisdiction, the fire official shall prepare a written notice citing the section allegedly violated, describing the condition deemed unsafe, and specifying time limitations for the required abatements to be made to render the structure or premises safe and secure.

B. 111.1.1 Right of appeal. Notices of violation issued under Section 111.1 shall indicate the right of appeal by referencing the appeals section of this code.

Exceptions:

1. Summons issued in lieu of a notice of violation in accordance with Section 111.5 of this code.

2. Documents reflecting uncorrected violations in subsequent inspections to verify compliance.

C. 111.2 Service. The written notice of violation of this code shall be served upon the owner, a duly authorized agent, or the occupant or other person responsible for the conditions under violation. Such notice shall be served either by delivering a copy of same to such persons by mail to the last known post office address; by delivering in person; by delivering it to and leaving it in the possession of any person in charge of the premises; in the case such person is not found upon the premises, by affixing a copy thereof in a conspicuous place at the entrance door or avenue of access; or by transmitting to a valid electronic mailbox. Such procedure shall be deemed the equivalent of personal notice. When the owner is not the responsible party to whom the notice of violation or correction notice is issued, a copy of the notice shall also be delivered to the owner or owner's agent.

D. 111.3 Failure to correct violations. If the notice of violation is not complied with within the time specified, the fire official shall request the legal counsel of the local governing body to institute the appropriate legal proceedings to restrain, correct, or abate such alleged violation.

E. 111.4 Penalty. Penalties upon conviction of violating the SFPC shall be as set out in § 27-100 of the Code of Virginia.

F. 111.5 Summons. When authorized and certified in accordance with § 27-34.2 of the Code of Virginia, the fire official may, subject to any limitations imposed by the local governing body, issue a summons in lieu of a notice of violation. Fire officials not certified in accordance with § 27-34.2 of the Code of Virginia may request the law-enforcement agency of the local governing body to make arrests for any alleged violations of the SFPC or orders affecting the immediate public safety.

13VAC5-52-120. Section 112 Appeals.

A. 112.1 Local Board of Fire Prevention Code Appeals (LBFPCA). Each local governing body that enforces the SFPC shall have a LBFPCA to hear appeals as authorized herein or it shall enter into an agreement with the governing body of another county or municipality, with some other agency, or with a state agency approved by the DHCD to act on appeals. An appeal case decided by some other approved agency shall constitute an appeal in accordance with this section and shall be final unless appealed to the State Review Board.

B. 112.2 Membership. The LBFPCA shall consist of at least five members appointed by the local governing body and having terms of office established by written policy. Alternate members may be appointed to serve in the absence of any regular members and, as such, shall have the full power and authority of the regular members. Regular and alternate members may be reappointed. Written records of current membership, including a record of the current chairman and secretary, shall be maintained in the office of the local governing body. In order to provide continuity, the terms of the members may be of different length so that less than half will expire in any one-year period. The LBFPCA shall meet as necessary to ensure a duly constituted board, appoint officers as necessary, and receive such training on the code as may be appropriate or necessary from staff of the locality.

C. 112.2.1 Chairman. The LBFPCA shall annually select one of its regular members to serve as chairman. In case of the

absence of the chairman at a hearing, the members present shall select an acting chairman.

D. 112.2.2 Secretary. The local governing body shall appoint a secretary to the LBFPCA to maintain a detailed record of all proceedings.

E. 112.3 Qualifications of members LBFPCA. Members shall be selected by the local governing body on the basis of their ability to render fair and competent decisions regarding application of the SFPC and shall, to the extent possible, represent different occupational or professional fields relating to building construction or fire prevention. At least one member should be an experienced builder and one member a licensed professional engineer or architect. Employees or officials of the local governing body shall not serve as members of the LBFPCA.

F. 112.4 Disqualification of member. A member shall not hear an appeal in which that member has conflict of interest in accordance with the State and Local Government Conflict of Interests Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2 of the Code of Virginia.

G. 112.5 Application for appeal. The owner of a structure, the owner's agent, or any other person involved in the maintenance of the structure or activity may appeal a decision of the fire official concerning the application of the SFPC or the fire official's refusal to grant modification under Section 106.5 to the provisions of the SFPC. The appeal shall first lie to the LBFPCA and then to the State Review Board, except that appeals concerning the application of the SFPC or refusal to grant modifications by the State Fire Marshal shall be made directly to the State Review Board. The appeal shall be submitted to the LBFPCA within 14 calendar days of the application of the SFPC. The application shall contain the name and address of the owner of the structure and the person appealing if not the owner. A copy of the written decision of the fire official shall be submitted along with the application for appeal and maintained as part of the record. The application shall be stamped or otherwise marked by the LBFPCA to indicate the date received. Failure to submit an application for appeal within the time limit established by this section shall constitute acceptance of the fire official's decision.

Note: In accordance with § 27-98 of the Code of Virginia, any local fire code may provide for an appeal to a local board of appeals. If no local board of appeals exists, the State Review Board shall hear appeals of any local fire code violation.

H. 112.6 Notice of meeting. The LBFPCA shall meet within 30 calendar days after the date of receipt of the application for appeal. Notice indicating the time and place of the hearing shall be sent to the parties in writing to the addresses listed on the application at least 14 calendar days prior to the date of the hearing. Less notice may be given if agreed upon by the applicant.

I. 112.7 Hearing procedures. All hearings before the LBFPCA shall be open to the public. The appellant, the appellant's representative, the local governing body's representative, and any person whose interests are affected shall be given an opportunity to be heard. The chairman shall have the power and duty to direct the hearing, rule upon the acceptance of evidence, and oversee the record of all proceedings.

J. 112.7.1 Postponement. When a quorum of the LBFPCA is not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing. The LBFPCA shall reschedule the appeal within 30 calendar days of the postponement.

K. 112.8 Decision. The LBFPCA shall have the power to uphold, reverse or modify the decision of the fire official by a concurring vote of a majority of those present. Decisions of the LBFPCA shall be final if no appeal is made therefrom and the appellant and the fire official shall act accordingly.

L. 112.8.1 Resolution. The LBFPCA's decision shall be explained in writing, signed by the chairman, and retained as part of the record by the LBFPCA. Copies of the written decision shall be furnished to all parties. The following wording shall be part of the written decision: "Any person who was a party to the appeal may appeal to the State Building Code Technical Review Board (State Review Board) by submitting an application to the State Review Board within 21 calendar days upon receipt by certified mail of the written decision. Application forms are available from the Office of the State Review Board, 600 East Main Street, Richmond, Virginia 23219, (804) 371-7150."

M. 112.9 Appeal to the State Review Board. After final determination by the LBFPCA, any person who was a party to the local appeal may appeal to the State Review Board. In accordance with § 36-114 of the Code of Virginia, the State Review Board shall have the power and duty to hear all appeals from decisions arising under the application of the SFPC and to render its decision on any such appeal, which decision shall be final if no appeal is made therefrom. Application shall be made to the State Review Board within 21 calendar days of receipt of the decision to be appealed. Application for appeal to the State Review Board arising from the SFMO's enforcement of the code or from any local fire code violation if no local board of appeals exists shall be made to the State Review Board within 14 calendar days of receipt of the decision to be appealed and shall be accompanied by copies of the fire official's decision and the written decision of the LBFPCA shall be submitted with the application for appeal. Upon request by the office of the State Review Board, the LBFPCA shall submit a copy of all inspection reports and all pertinent information from the record of the LBFPCA. Failure to submit an application for appeal within the time limit established by this section shall constitute an acceptance of the LBFPCA's resolution or fire official's decision. Procedures of

the State Review Board are in accordance with Article 2 (§ 36-108 et seq.) of Chapter 6 of Title 36 of the Code of Virginia.

N. 112.10 Hearing and decision. All hearings before the State Review Board shall be open meetings, and the chair shall have the power and duty to direct the hearing, rule upon the acceptance of evidence, and oversee the record of all proceedings. The State Review Board shall have the power to uphold, reverse, or modify the decision of the LBFPCA by a concurring vote of a majority of those present. Proceedings of the State Review Board shall be governed by the provisions of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia), except that an informal conference pursuant to § 2.2-4019 of the Code of Virginia shall not be required. Decisions of the State Review Board shall be final if no further appeal is made. The decision of the State Review Board shall be explained in writing, signed by the chair, and retained as part of the record of the appeal. Copies of the written decision shall be sent to all parties by certified mail. In addition, the written decision shall contain the following wording: "As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty (30) days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a Notice of Appeal with the Secretary of the Review Board. In the event that this decision is served on you by mail, three (3) days are added to that period."

Part II
Technical Amendments

13VAC5-52-130. Application of Part II.

The changes in this part shall be made to the model codes and standards as indicated in this chapter for use as part of the SFPC.

13VAC5-52-140. IFC Section 202 Definitions.

A. Add the following definitions to read:

Applicable building code. The local or statewide building code and referenced standards in effect at the time the building or portion thereof was constructed, altered, renovated, or underwent a change of occupancy. See Section 103 for the application of the code.

Background clearance card or BCC. An identification card issued to an individual who is not a certified blaster or pyrotechnician and is responsible management or an employee of a company, corporation, firm, or other entity solely for the purpose of submitting an application to the fire official for a permit to manufacture, use, handle, store, or sell explosive materials or conduct a fireworks display. A person to whom a BCC has been issued can fulfill the role of a designated individual on an application for a permit to manufacture, use, handle, store, or sell explosive materials or on an application for a permit to design, setup, and conduct a fireworks display.

Blaster, restricted. Any person engaging in the use of explosives or blasting agents utilizing five pounds (2.25 kg) or less per blasting operation and using instantaneous detonators. A certified restricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.

Blaster, unrestricted. Any person engaging in the use of explosives or blasting agents without the limit to the amount of explosives or blasting agents or type of detonator. A certified unrestricted blaster can fulfill the role of a designated individual on an application for permit to manufacture, use, handle, store, or sell explosive materials.

Cooking tent. A structure, enclosure, or shelter, with or without sidewalls or drops, constructed of fabric or pliable material supported by any manner except by air or the contents that it protects and that contains cooking equipment that utilize open flames or produce smoke or grease laden vapors for the purpose of preparing and serving food to the public.

Design. For the purposes of a fireworks display, either inside a building or structure or outdoors, design shall mean the pyrotechnician who will be in attendance and makes the final artistic determination for the placement of fireworks and ground display pieces suitable for the display site.

Designated individual. A person who is in possession of a BCC issued by the SFMO, certified by the SFMO as a pyrotechnician or a restricted or unrestricted blaster, any of whom are responsible for ensuring compliance with state law and regulations relating to blasting agents and explosives and applying for explosives or firework permits; is at least 21 years of age; and demonstrates the capability to effectively communicate safety messages verbally and in writing in the English language.

DHCD. The Virginia Department of Housing and Community Development.

Emergency supplemental hardware. Any approved hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill.

Explosive manufacturing. Mixing, blending, extruding, assembling articles, disassembling, chemical synthesis, and other functions involved in making a product or device that is intended to explode.

LBFPCA. Local Board of Fire Prevention Code Appeals.

Local government, local governing body, or locality. The governing body of any county, city, or town, other political subdivision, and state agency in this Commonwealth charged with the enforcement of the SFPC under state law.

Maintained. To keep unimpaired in an appropriate condition, operation, and continuance as installed in accordance with

the applicable building code or as previously approved and in accordance with the applicable operational and maintenance provisions of this code.

Night club. Any building or portion thereof in which the main use is a place of public assembly that provides exhibition, performance, or other forms of entertainment; serves alcoholic beverages; and provides music and space for dancing.

Outdoor fireplace. A portable or permanent, outdoor, solid-fuel-burning fireplace that may be constructed of steel, concrete, clay, or other noncombustible material. An outdoor fireplace may be open in design with a spark arrester or may be equipped with a small hearth opening and a short chimney or chimney opening in the top with a combustion chamber of not more than 36 inches in diameter by 24 inches in height size.

Permissible fireworks. Any fountains that do not emit sparks or other burning effects to a distance greater than five meters (16.4 feet); wheels that do not emit a flame radius greater than one meter (39 inches); crackling devices and flashers or strobes that do not emit sparks or other burning effects to a distance greater than two meters (78.74 inches); and sparkling devices or other fireworks devices that (i) do not explode or produce a report, (ii) do not travel horizontally or vertically under their own power, (iii) do not emit or function as a projectile, (iv) do not produce a continuous flame longer than 20 inches, (v) are not capable of being reloaded, and (vi) if designed to be ignited by a fuse, have a fuse that is protected to resist side ignition and a burning time of not less than four seconds and not more than eight seconds.

Pyrotechnician (firework operator). Any person supervising or engaged in the design, setup, or conducting of any fireworks display, either inside a building or outdoors. A certified pyrotechnician can fulfill the role of a designated individual on an application for a permit for a fireworks display.

Pyrotechnician, aerial. A person supervising or engaged in the design, setup, or conducting of an outdoor aerial fireworks display performed in accordance with the regulations as set forth in this code and NFPA 1123, a referenced standard for fireworks displays.

Pyrotechnician, proximate. A person supervising or engaged in the design, setup, or conducting of a fireworks display, either inside a building or outdoors, performed in accordance with the regulations as set forth in this code and NFPA 1126, a referenced standard for the use of pyrotechnics before a proximate audience.

Reactive target. A target designator intended to be shot at with a firearm and is purchased or obtained through a commercial or retail outlet and is comprised of two or more components in presized quantities of one pound (0.453592 kg) or less that are advertised, and the two are sold together with instructions on how to combine the components or create a target that explodes upon impact. Also known as exploding targets.

Responsible management. A person who is any of the following:

1. The sole proprietor of a sole proprietorship.
2. The partners of a general partnership.
3. The managing partners of a limited partnership.
4. The officers or directors of a corporation.
5. The managers or members of a limited liability company.
6. The managers, officers, or directors of an association.
7. Individuals in other business entities recognized under the laws of the Commonwealth as having a fiduciary responsibility to the firm.

Restricted explosives manufacturing. When an individual is engaged in the incidental manufacture or production of explosive materials composed of commercially available components that are packaged or marketed for the purpose of producing explosive materials, including reactive targets, at a location not within the definition of unrestricted explosives manufacture; is for immediate use at the site of incidental explosives manufacturing or production without residual storage; and does not involve or include the bulk mixing and delivery vehicles that are within the scope of NFPA 495.

Sole proprietor. A person or individual, not a corporation, who is trading under the person's or individual's own name or under an assumed or fictitious name pursuant to the provisions of §§ 59.1-69 through 59.1-76 of the Code of Virginia.

State Fire Marshal. The State Fire Marshal as provided for by § 9.1-206 of the Code of Virginia.

State regulated care facility or SRCF. A building occupied by persons in the care of others where program oversight is provided by the Virginia Department of Social Services, the Virginia Department of Behavioral Health and Developmental Services, the Virginia Department of Education, the Virginia Department of Health, or the Virginia Department of Juvenile Justice.

State Review Board. The Virginia State Building Code Technical Review Board as established under § 36-108 of the Code of Virginia.

Teaching and research laboratory. A building or portion of a building where hazardous materials are stored, used, and handled for the purpose of testing, analysis, teaching, research, or developmental activities on a nonproduction basis rather than in a manufacturing process.

Technical assistant. Any person employed by or under an extended contract to a local enforcing agency for enforcing

the SFPC. For the purposes of this definition, an extended contract shall be a contract with an aggregate term of 18 months or longer.

Unrestricted explosives manufacturing. When any company, person, or group of persons is engaged in the business of manufacturing or producing explosive materials at a fixed site or facility for the purpose of commercial sale, use, or distribution of explosives.

USBC. The Virginia Uniform Statewide Building Code (13VAC5-63).

B. Change the following definitions to read:

Approved. Acceptable to the authority having jurisdiction.

Automatic fire-extinguishing system. An approved system of devices and equipment that automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire. Such system shall include an automatic sprinkler system, unless otherwise expressly stated.

Building. A combination of materials, whether portable or fixed, having a roof to form a structure for the use or occupancy by persons, or property. The word "building" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Building" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Commonwealth Transportation Board.

Change of occupancy. Either of the following shall be considered a change of occupancy where the current Virginia Construction Code (VCC) requires a greater degree of accessibility, structural strength, fire protection, means of egress, ventilation, or sanitation than that which is existing in the current building or structure:

1. Any change in the occupancy classification of a building or structure.

2. Any change in the purpose of, or change in the level of activity within, a building or structure.

Note: The use and occupancy classification of a building or structure shall be determined in accordance with Chapter 3 of the VCC.

Corrosive. A chemical that causes visible destruction of or irreversible alterations in living tissue by chemical action at the point of contact. A chemical shall be considered corrosive if when tested on the intact skin of albino rabbits by the method described in DOTn 49 CFR 173.137, such chemical destroys or changes irreversibly the structure of the tissue at the point of contact following an exposure period of four hours. This term does not refer to action on inanimate surfaces. A substance shall be considered corrosive if it has a pH less than or equal to 2.0 or a pH greater than or equal to 12.5 on a pH scale of 0-14.

Fire code official. The officer or other designated authority charged with administration and enforcement of this code, or a duly authorized representative. For the purpose of this code, the terms "code official" and "fire official" shall have the same meaning as the term "fire code official" and, in addition, such official shall have the powers outlined in § 27-98.1 of the Code of Virginia.

Fireworks. Any firecracker, torpedo, skyrocket, or other substance or object of whatever form or construction that contains any explosive or inflammable compound or substance and is intended or commonly known as fireworks and that explodes, rises into the air or travels laterally, or fires projectiles into the air. Fireworks shall not include automobile flares, paper caps containing not more than the average of 0.25 grain (16 mg) of explosive content per cap or toy pistols, toy canes, toy guns, or other devices utilizing such caps and items commonly known as party poppers, pop rocks, and snap-n-pops. Fireworks may be further delineated and referred to as:

Fireworks, 1.4G (formerly known as Class C, Common Fireworks). Small fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Such 1.4G fireworks that comply with the construction, chemical composition, and labeling regulations of the DOTn for Fireworks, UN0336, and the U.S. Consumer Product Safety Commission (CSPC) as set forth in CPSC 16 CFR Parts 1500 and 1507, are not explosive materials for the purpose of this code.

Fireworks, 1.3G (formerly Class B, Special Fireworks). Large fireworks devices, which are explosive materials intended for the use in fireworks displays and designed to produce audible or visible effects by combustion, deflagration, or detonation. Such 1.3G fireworks include firecrackers containing more than 130 milligrams (two grains) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition, and other display pieces that exceed the limits for classification as 1.4G fireworks. Such 1.3G fireworks are also described as Fireworks, UN0335 by the DOTn.

Laboratory suite. A fire-rated enclosed laboratory area that will provide one or more laboratory spaces within a Group B educational occupancy that are permitted to include ancillary uses such as offices, bathrooms, and corridors that are contiguous with the laboratory area and are constructed in accordance with Section 430.3 of the USBC, Part I, Construction (13VAC5-63-220 L).

Mobile food preparation vehicles. Vehicles, covered trailers, carts, and enclosed trailers, or other moveable devices capable of being able to be occupied by persons during cooking operations and that contain cooking equipment that

utilize open flames or are capable of producing smoke or grease laden vapors for the purpose of preparing and serving food to the public. Vehicles used for private recreation shall not be considered mobile food preparation vehicles.

Occupancy classification. For the purposes of this code, occupancies are defined in accordance with the applicable building code.

Smokeless propellants. Solid propellants, commonly referred to as smokeless powders or any propellant classified by DOTn as a smokeless propellant in accordance with NA3178, Smokeless Powder for Small Arms, used in small arms ammunition, firearms, cannons, rockets, propellant-actuated devices, and similar articles.

13VAC5-52-150. IFC Chapter 3 General Requirements.

A. The following changes shall be made to Section 301, General:

1. Change Section 301.2 to read:

301.2 Permits. Permits shall be required as set forth in Section 107.2 for the activities or uses regulated by Sections 306, 307, 308, 315, and 319.

2. Add Section 301.3 to read:

301.3 Occupancy. The occupancy of a structure shall be continued as originally permitted under and in full compliance with the codes in force at the time of construction or alteration. The occupancy of a structure shall not change to another occupancy that will subject the structure to any special provisions of this code or the applicable building code without the approval of the building official. Where a certificate of occupancy is not available for a building, the owner or owner's agent may request that one be issued by the building official and retained on site for reference.

B. The following changes shall be made to Section 302, Definitions:

Change Section 302.1 to read:

302.1 Definitions. The following terms are defined in Chapter 2:

3D Printer.

Additive Manufacturing.

Bonfire.

Explosive manufacturing.

Hi-boy.

High-voltage transmission line.

Mobile food preparation vehicles.

Open burning.

Portable outdoor fireplace.

Powered industrial truck.

Reactive targets.

Recreational fire.

Restricted explosives manufacturing.

Sky lantern.

Unrestricted explosives manufacturing.

C. The following changes shall be made to Section 304, Combustible Waste Material:

1. Change Section 304.1.2 to read:

304.1.2 Vegetation. Weeds, grass, vines, or other growth that is capable of being ignited and endangering property shall be cut down and removed by the owner or occupant of the premises.

2. Change Section 304.1.3 to read:

304.1.3 Space underneath seats. Spaces underneath grandstand and bleacher seats shall be kept free from combustible and flammable materials.

Exception: Where enclosed by fire-resistance-rated construction or otherwise approved in accordance with the applicable building code.

3. Change Section 304.3.2 to read:

304.3.2 Capacity exceeding 5.88 cubic feet. Containers with a capacity exceeding 5.88 cubic feet (44 gallons) (0.17 m^3) shall be provided with lids. Containers and lids shall be constructed of noncombustible materials or of combustible materials with a peak rate of heat release not exceeding 300 kW/m^2w where tested in accordance with ASTM E1354 at an incident heat flux of 50 kW/m^2w in the horizontal orientation.

Exception: Wastebaskets complying with Section 808.

4. Change Exception 1 (Exceptions 2 and 3 remain) of Section 304.3.3 to read:

1. Dumpsters or containers in areas protected by an approved automatic sprinkler system installed throughout in accordance with the applicable NFPA 13 standard.

5. Change Exception 1 (Exception 2 remains) of Section 304.3.4 to read:

1. Dumpsters in areas protected by an approved automatic sprinkler system installed throughout in accordance with the applicable NFPA 13 standard.

D. The following change shall be made to Section 306, Motion Picture Projection Rooms and Film:

Change Section 306.1 to read:

306.1 Motion picture projection rooms. Electric arc, xenon, or other light source projection equipment that develops hazardous gases, dust, or radiation and the projection of ribbon-type cellulose nitrate film, regardless of the light source used in projection shall be operated within a motion picture projection room complying with the applicable building code.

E. The following changes shall be made to Section 307, Open Burning, Recreational Fires and Portable Outdoor Fireplaces:

1. Add an exception to Section 307.1 to read:

Exception: Approved outdoor live fire training using equipment or appliances accessible or available to the general public, and that complies with Section 307.4.

2. Change Section 307.2 to read:

307.2 Permit required. A permit shall be obtained from the fire code official in accordance with Section 107.2 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or a bonfire. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

F. The following changes shall be made to Section 308, Open Flames:

1. Change Section 308.1.6 to read:

308.1.6 Open-flame devices. Torches and other devices, machines, or processes liable to start or cause fire shall not be operated or used in or upon wildfire risk areas, except by a permit in accordance with Section 107.2 secured from the fire code official.

2. Change Section 308.2 (Items 1 through 3 remain) to read:

308.2 Permits required. Permits shall be obtained from the fire code official in accordance with Section 107.2 prior to engaging in the following activities involving open flame, fire, and burning:

3. Change Exception 2 (Exceptions 1 and 3 remain) of Section 308.3 to read:

2. Heat-producing equipment complying with Chapter 6 and the applicable building code.

G. The following changes shall be made to Section 311, Vacant Premises:

1. Change Section 311.1.1 to read:

311.1.1 Abandoned premises. Buildings, structures, and premises for which an owner cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties shall be considered abandoned and unsafe until declared abated in accordance with the Virginia Maintenance Code or the applicable building code.

2. Change Section 311.2.3 to read:

311.2.3 Fire separation. Fire-resistance-rated partitions, fire barriers, and fire walls separating vacant tenant spaces from the remainder of the building shall be maintained. Protection of openings, joints, and penetrations in fire-resistance-rated assemblies shall be maintained in accordance with Chapter 7.

3. Change Exception 1 (Exception 2 remains) of Section 311.3 to read:

1. Buildings or portions of buildings undergoing additions, alterations, repairs, or change of occupancy in accordance with the applicable building code where waste is controlled and removed as required by Section 304.

4. Add Section 311.5.6 to read:

311.5.6 Removal. Removal of placards posted in accordance with this section without the approval of the fire official shall be a violation of this code.

5. Change Item 2 (Items 1, 3, and 4 remain) of Section 311.6 to read:

2. Where provided, fire rated separations from the adjoining tenant spaces shall be maintained in accordance with Chapter 7.

H. The following changes shall be made to Section 313, Fueled Equipment:

Change Section 313.1 to read:

313.1 General. Fueled equipment, including motorcycles, mopeds, lawn-care equipment, portable generators, and portable cooking equipment shall not be stored, operated, or repaired within a building.

Exceptions:

1. Buildings or rooms constructed for such use in accordance with the applicable building code.

2. Where allowed by Section 314.

3. Storage of equipment utilized for maintenance purposes is allowed in approved locations where the aggregate fuel capacity of the stored equipment does not exceed 10 gallons (38 L) and the building is protected throughout by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

I. The following changes shall be made to Section 314, Indoor Displays:

1. Change Section 314.1 to read:

314.1 General. Indoor displays constructed within any building or structure shall comply with Sections 314.2 through 314.5.

2. Add Section 314.5 to read:

314.5 Smokeless powder and small arms primers. Venders shall not store, display, or sell smokeless powder or small arms primers during trade shows inside exhibition halls except as follows:

1. The amount of smokeless powder displayed by each vender is limited to the amount established in Section 5606.5.1.1.

2. The amount of smokeless powder each vender may store is limited to the storage arrangements and storage amounts established in Section 5606.5.2.1. Smokeless powder shall remain in the manufacturer's original sealed container, and the container shall remain sealed while inside the building. The repackaging of smokeless powder shall not be performed inside the building. Damaged containers shall not be repackaged inside the building and shall be immediately removed from the building in such manner to avoid spilling any powder.

3. There shall be at least 50 feet separation between venders and 20 feet from any exit.

4. Small arms primers shall be displayed and stored in the manufacturer's original packaging and in accordance with the requirements of Section 5606.5.2.3.

J. The following changes shall be made to Section 315, General Storage:

1. Change Section 315.2 to read:

315.2 Permit required. A permit for miscellaneous combustible storage shall be required as set forth in Section 107.2.

2. Change Exception 2 of Section 315.3.1 and Section 315.3.4 to read:

2. The 18-inch (457 mm) ceiling clearance is not required for storage along walls in areas of buildings equipped with an automatic sprinkler system in accordance with the applicable NFPA 13 standard.

315.3.4 Attic, under-floor, and concealed spaces. Attic, under-floor, and concealed spaces shall not be used for storage of combustible materials unless approved or not prohibited by the applicable building code.

3. Change Section 315.4.1 to read:

315.4.1 Storage beneath overhead projections from buildings. To the extent required by the code the building was constructed under, when buildings are required to be protected by automatic sprinklers, the outdoor storage, display, and handling of combustible materials under eaves, canopies, or other projections or overhangs is prohibited except where automatic sprinklers are installed under such eaves, canopies, or other projections or overhangs.

4. Change Section 315.6 to read:

315.6 Storage in plenums. Storage shall not be permitted in plenums unless approved for such use by the applicable building code. Abandoned material in plenums shall be deemed to be storage and shall be removed. Where located in plenums, the accessible portion of abandoned cables that are not identified for future use with a tag shall be deemed storage and shall be removed.

K. The following changes shall be made to Section 316, Hazards to Fire Fighters:

Change Sections 316.6 through 316.6.2 to read:

316.6 Structures and outdoor storage underneath high-voltage transmission lines, bridges, and elevated roadways. Structures and outdoor storage underneath high-voltage transmission lines, bridges, and elevated roadways shall comply with Sections 316.6.1 and 316.6.2, respectively.

316.6.1 Structures. Structures shall not be constructed within the utility easement beneath high-voltage transmission lines or underneath bridges or elevated roadways unless approved.

316.6.2 Outdoor storage. Outdoor storage within the utility easement underneath high-voltage transmission lines or underneath bridges or elevated roadways shall be limited to noncombustible materials. Storage of hazardous materials, including flammable and combustible liquids, is prohibited.

Exception: Combustible storage, including vehicles and fuel storage for backup power equipment serving public utility equipment or for the construction, repair, or maintenance operations of bridges or elevated roadways, is allowed provided that a plan indicating the storage configuration is submitted and approved.

L. The following changes shall be made to Section 317, Landscaped Roofs:

1. Change Section 317.1 to read:

317.1 General. Landscaped roofs shall be maintained in accordance with Sections 317.2 through 317.5.

2. Change Section 317.2 to read:

317.2 Landscaped roof size. Landscaped roof areas shall not exceed the size approved in accordance with the applicable building code.

3. Change Section 317.3 to read:

317.3 Rooftop structure and equipment clearance. Required structure and equipment clearances shall be maintained as provided by the applicable building code.

M. The following change shall be made to Section 318, Laundry Carts:

Change Exception 1 (Exception 2 remains) of Section 318.1 to read:

1. Laundry carts in areas protected by an approved automatic sprinkler system throughout in accordance with the applicable NFPA 13 standard.

N. Change Section 319, Mobile Food Preparation Vehicles, to read:

319.1 General. Mobile food preparation vehicles that are equipped with appliances that utilize open flames or produce smoke or grease laden vapors shall comply with this section.

319.1.1 Wheel chocks. Wheel chocks shall be used to prevent mobile food preparation vehicles from moving.

319.1.2 Separation. Mobile food preparation vehicles shall be separated from buildings or structures, combustible materials, vehicles, and other cooking operations by a minimum of 10 ft. (3m).

319.2 Permit required. Permits shall be required as set forth in Section 107.2.

319.2.1 Permit authority having jurisdiction (AHJ). The enforcing agent of a permit requirement on a mobile food preparation vehicle (MFPV) shall be the appointed fire official for the Virginia local government to which the food truck is identified for personal property tax payment of the vehicle. If no such entity exists, if the local government has elected to not enforce this section of the SFPC, or if the MFPV is housed out of state, then it shall be the State Fire Marshal's Office (SFMO) or designee.

319.3 Seating. Seating for the public within any mobile food preparation vehicles is prohibited.

319.4 Exhaust hood. Cooking equipment that produces grease laden vapors shall be provided with a kitchen exhaust hood in accordance with NFPA 96, Annex B.

319.5 Fire protection. Fire protection shall be provided in accordance with Sections 319.5.1 through 319.5.2.

319.5.1 Fire protection for cooking equipment. Cooking equipment shall be protected by automatic fire extinguishing systems in accordance with Section 904.3.1.

319.5.2 Fire extinguisher. Portable fire extinguishers shall be provided in accordance with Section 906.4.

319.6 Appliance connection to fuel supply. Gas cooking appliances shall be secured in place and connected to fuel supply piping with an appliance connector complying with ANSI Z21.69/CSA 6.16. The connector installation shall be configured in accordance with manufacturer's installation instructions. Movement of appliances shall be limited by restraining devices installed in accordance with the connector and appliance manufacturer's instructions.

319.6.1 Construction and modifications. Following initial construction and any modifications of the fuel system, the system, including hoses, shall be proven free of leaks by performing a pressure test in accordance with NFPA 58 at not less than the normal operating pressure.

319.6.2 Leak detection. Gas systems shall be inspected prior to each use and following fuel tank replacement or refill in one of the following methods:

1. A water and soap solution shall be applied to every accessible connection or connection manipulated during the replacement or fueling and observed for evidence of gas leakage.

2. Pressure testing in accordance with Annex L of NFPA 58.

319.6.3 Leaks. When leaks are discovered during inspections and testing, the fuel supply shall be secured in the "off" position or disconnected from the appliance, and the appliance shall not be operated until serviced by a qualified person.

319.7 Cooking oil storage containers. Cooking oil storage containers within mobile food preparation vehicles shall have a minimum aggregate area volume not to exceed 120 gallons (454 L) and shall be stored in such a way as to not be toppled or damaged during transport.

319.8 Cooking oil storage tanks. Cooking oil storage tanks within mobile food preparation vehicles shall comply with Sections 319.8.1 through 319.8.5.

319.8.1 Metallic storage tanks. Metallic cooking oil storage tanks shall be listed in accordance with UL 142 or UL 80, and shall be installed in accordance with the tank manufacturer's instructions.

319.8.2 Nonmetallic tanks. Nonmetallic cooking oil storage tanks shall be installed in accordance with the tank manufacturer's instructions and shall also comply with all of the following:

1. Tanks shall be listed for use with cooking oil, including maximum temperature to which the tanks will be exposed to during use.

2. Tank capacity shall not exceed 200 gallons (757 L) per tank.

319.8.3 Cooking oil storage system components. Metallic and nonmetallic cooking oil storage system components shall include piping, connections, fittings, valves, tubing, hose, pumps, vents, and other related components used for the transfer of cooking oil.

319.8.4 Design criteria. The design, fabrication, and assembly of system components shall be suitable for the working pressures, temperatures, and structural stresses to be encountered by the components.

319.8.5 Tank venting. Normal and emergency venting shall be provided for cooking oil storage tanks.

319.8.5.1 Normal vents. Normal vents shall be located above the maximum normal liquid line and shall have a minimum effective area not smaller than the largest filling or withdrawal connection. Normal vents are not required to vent to the exterior.

319.8.5.2 Emergency vents. Emergency relief vents shall be located above the maximum normal liquid line and shall be in the form of a device that will relieve excessive internal pressure caused by an exposure fire. For

nonmetallic tanks, the emergency relief vent shall be allowed to be in the form of construction. Emergency vents are not required to discharge to the exterior.

319.9 Liquefied petroleum gas (LP-gas) systems. Where LP-gas systems provide fuel for cooking appliances, such systems shall comply with NFPA 58, Chapter 61, and Sections 319.9.1 through 319.9.5.

319.9.1 Maximum aggregate volume. The maximum aggregate capacity of LP-gas containers transported on the vehicle and used to fuel cooking appliances only shall not exceed 200 pounds propane capacity.

319.9.2 Protection of container. LP-gas containers installed on the vehicle shall be securely mounted and restrained to prevent movement.

319.9.3 LP-gas container construction. LP-gas containers shall be manufactured in compliance with the requirements of NPFA 58.

319.9.4 Protection of system piping. LP-gas system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage, and damage from vibration.

319.9.5 LP-gas alarms. A listed LP-gas alarm shall be installed with the vehicle in the vicinity of LP-gas system components, in accordance with manufacturer's instructions.

319.10 Compressed natural gas (CNG) systems. Where CNG systems provide fuel for cooking appliances, such systems shall comply with Sections 319.10.1 through 319.10.4.

319.10.1 CNG containers supplying only cooking fuel. CNG containers installed solely to provide fuel for cooking purposes shall be in accordance with Sections 319.10.1.1 through 319.10.1.3.

319.10.1.1 Maximum aggregate volume. The maximum aggregate capacity of CNG containers transported on the vehicle shall not exceed 1,300 pounds water capacity.

319.10.1.2 Protection of container. CNG containers shall be securely mounted and restrained to prevent movement. Containers shall not be installed in locations subject to direct vehicle impact.

319.10.1.3 CNG container construction. The construction of CNG containers shall be approved.

319.10.2 CNG containers supplying transportation and cooking fuel. Where CNG containers and systems are used to supply fuel for cooking purposes in addition to being used for transportation fuel, the installation shall be in accordance with NFPA 52.

319.10.3 Protection of system piping. CNG system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage, and damage from vibration.

319.10.4 Methane alarms. A listed methane gas alarm shall be installed within the vehicle in accordance with manufacturer's instructions.

319.11 Maintenance. Maintenance of systems on mobile food preparation vehicles shall be in accordance with Sections 319.11.1 through 319.11.3.

319.11.1 Exhaust system. The exhaust system, including hood, grease-removal devices, fans, ducts and other appurtenances, shall be inspected and cleaned in accordance with Chapter 6.

319.11.2 Fire protection systems and devices. Fire protection systems and devices shall be maintained in accordance with Chapter 9.

319.11.3 Fuel-gas systems. LP-gas containers installed on the vehicle and fuel-gas piping systems shall be inspected annually by an approved inspection agency or a company that is registered with the U.S. Department of Transportation to requalify LP-gas cylinders to ensure that system components are free of damage, suitable for the intended service, and not subject to leaking. CNG containers shall be inspected every three years in a qualified service facility. CNG containers shall not be used past their expiration dates listed on the manufacturer's container label. Upon satisfactory inspection, the approved inspection agency shall affix a tag on the fuel-gas system or within the vehicle indicating the name of the inspection agency and the date of satisfactory inspection.

13VAC5-52-160. IFC Chapter 4 Emergency Planning and Preparedness.

A. The following change shall be made to Section 401, General:

Add Section 401.1.1 to read:

401.1.1 State regulated care facilities (SRCF). When a state license is required by the Virginia Department of Social Services, Virginia Department of Behavioral Health and Developmental Services, Virginia Department of Education, or Virginia Department of Juvenile Justice to operate, SRCF shall comply with this section and the provisions of Section 404.

B. The following changes shall be made to Section 403, Emergency Preparedness Requirements:

1. Add Section 403.1.1 to read:

403.1.1 Maintaining occupant load posting. Occupant load postings required by the building code are required to be maintained.

2. Add Sections 403.2.2.1, 403.2.2.1.1, and 403.2.2.1.2 to read:

403.2.2.1 Night clubs. Night clubs shall comply with Sections 403.2.2.1.1 and 403.2.2.1.2.

403.2.2.1.1 Audible announcements. Audible announcements shall be made to the occupants no longer than 10 minutes prior to the start of the entertainment and at each intermission to notify the occupants of the location of the exits to be used in the event of a fire or other emergency.

403.2.2.1.2 Occupant load count. Upon request of the fire code official, the owner, operator, or both will be required to keep a running count of the occupant load to provide to the fire code official during performance hours of operation, entertainment hours of operation, or both.

3. Change the exception to Section 403.7.3.4 to read:

Exception: An employee shall not be required to be within three floors or 300 feet (91,440 mm) horizontal distance of the access door of each resident housing area in areas in which all locks are unlocked remotely and automatically in accordance with the applicable building code.

4. Change Section 403.9 to read:

403.9 Group R occupancies. Group R occupancies shall comply with Sections 403.9.1.1 through 403.9.4.

5. Add Section 403.9.4 to read:

403.9.4 Groups R-3 and R-5 lodging facilities. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Groups R-3 and R-5 bed and breakfasts and other transient boarding facilities that are either proprietor or nonproprietor occupied.

6. Change Section 403.10 to read:

403.10 Special uses. Special uses shall be in accordance with Sections 403.10.1 through 403.10.6.

7. Change Section 403.10.1.4 to read:

403.10.1.4 Lease plan revisions. The lease plans shall be revised annually or as often as necessary to keep them current. Modifications or changes in tenants or occupancies shall not be made without prior approval of the fire code official.

8. Add Section 403.10.6 to read:

403.10.6 SRCF. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for SRCFs.

C. The following changes shall be made to Section 404, Fire Safety, Evacuation and Lockdown Plans:

1. Change Item 4.4 of Section 404.2.3.1 to read:

4.4. A description of how locking means and methods are in compliance with the requirements of the VCC and the applicable provisions of this code for egress and accessibility.

2. Change Section 404.4.1 to read:

404.4.1 Distribution. The fire safety, evacuation and lockdown plans shall be distributed to the tenants and building service employees by the owner or owner's agent. Tenants shall distribute to their employees applicable parts of the fire safety plan and lockdown plan affecting the employees' actions in the event of a fire or other emergency. Fire safety and evacuation plans shall be made available by the proprietor of Groups R-3 and R-5 bed and breakfasts and other transient boarding facilities to transient guests upon their arrival or are present in each transient guest room.

D. The following changes shall be made to Section 405, Emergency Evacuation Drills

1. Add an exception to Section 405.1 to read:

Exception: Emergency evacuation drills shall not be conducted in school buildings during periods of mandatory testing required by the Virginia Board of Education.

2. Add the following row to Table 405.3 and change Footnote b to read:

Group or Occupancy	Frequency	Participation
Group R SRCF except hospice	Monthly	All occupants

b. Emergency evacuation drills in Group R-2 college and university buildings shall be in accordance with Section 403.9.2.1. Emergency evacuation drills are required in Group R-2 occupancies that are designed or developed and marketed to senior citizens 55 years of age or older in accordance with 42 USC § 3607(b)(2). Other Group R-2 occupancies do not require routine emergency evacuation drills but shall be in accordance with Section 403.9.2.2.

3. Add Section 405.3.1 to read:

405.3.1 High-rise buildings. Fire exit drills shall be conducted annually by building staff personnel or the owner of the building in accordance with the fire safety plan and shall not affect other current occupants.

E. The following change shall be made to Section 406, Employee Training and Response Procedures:

Add Section 406.3.4.1 to read:

406.3.4.1 Emergency supplemental hardware training. Where a facility has installed approved emergency supplemental hardware, employees shall be trained on their assigned duties and procedures for the use of such device. Records of in-service training shall be made available to the fire code official upon request.

F. The following changes shall be made:

407.2 Safety data sheets. Safety data sheets (SDS) for all hazardous materials shall be either readily available on the

premises as a paper copy or readily retrievable by electronic access.

13VAC5-52-170. IFC Chapter 5 Fire Service Features.

A. The following changes shall be made to Section 501, General:

1. Change Section 501.2 to read:

501.2 Permits. A permit shall be required as set forth in Section 107.2.

2. Delete Section 501.4.

B. The following changes shall be made to Section 503, Fire Apparatus Access Roads:

1. Add exceptions to Section 503.1 to read:

Exceptions:

1. Fire apparatus access roads shall be permitted to be provided and maintained in accordance with written policy that establish fire apparatus access road requirements, and such requirements shall be identified to the owner or the owner's agent prior to the building official's approval of the building permit.

2. On construction and demolition sites fire apparatus access roads shall be permitted to be provided and maintained in accordance with Section 3310.1.

2. Change Exception 1 (Exception 2 remains) of Section 503.1.1 to read:

Exceptions:

1. The fire code official is authorized to increase the dimension of 150 feet (45,720 mm) where any of the following conditions occur:

1.1. The building is equipped throughout with an approved automatic sprinkler system in accordance with the applicable NFPA13, NFPA 13R, or NFPA 13D standard.

1.2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades, or other similar conditions, and an approved alternative means of fire protection is provided.

1.3. There are not more than two Group R-3, Group R-5, or Group U occupancies.

3. Add an exception to Section 503.2.1 to read:

Exception: Fire apparatus access roads exclusively serving single-family dwelling or townhouse developments that are fully sprinklered as provided for in Section R313.1 or R313.2 of the International Residential Code shall have an unobstructed width of not less than 18 feet (5486 mm), exclusive of shoulders.

4. Add Section 503.7 to read:

503.7 Fire lanes for existing buildings. The fire code official is authorized to designate public and private fire lanes as deemed necessary for the efficient and effective operation of fire apparatus. Fire lanes shall comply with Sections 503.2 through 503.7.

C. The following changes shall be made to Section 504, Access to Building Openings and Roofs:

1. Change Section 504.1 to read:

504.1 Required access. Exterior doors and openings required by the applicable building code shall be maintained readily accessible for emergency access by the fire department. An approved access walkway leading from fire apparatus access roads to exterior openings shall be provided when required by the fire code official.

2. Change Section 504.3 to read:

504.3 Stairway access to roof. Stairway access to the roof shall be maintained and marked at street and floor levels with a sign indicating that the stairway continues to the roof.

D. The following changes shall be made to Section 507, Fire Protection Water Supplies:

1. Add Section 507.3.1 to read:

507.3.1 Fire flow requirements for fully sprinklered residential developments. Notwithstanding Section 103.1.2, the fire flow requirements in Table B105.1(1) of Appendix B of the IFC shall be permitted to be used for determining fire flow in single-family dwelling and townhouse developments which are fully sprinklered as provided for in Section R313.1 or R313.2 of the International Residential Code.

2. Change Section 507.5.1 to read:

507.5.1 Where required. Fire hydrant systems shall be located and installed as directed by the fire department. Fire hydrant systems shall conform to the written standards of the jurisdiction and the fire department.

Exceptions:

1. For in-fill development of fewer than five detached single-family dwellings constructed in existing residential developments.

2. For the reconstruction or rehabilitation of detached single-family dwellings.

3. Add Section 507.5.1.2 to read:

507.5.1.2 Fire hydrant requirements for fully sprinklered residential developments. Notwithstanding Section 103.1.2, the number and distribution of fire hydrants in Table C102.1 of Appendix C of the IFC shall be permitted to be used in single-family dwelling and townhouse developments that are fully sprinklered as provided for in Section R313.1 or R313.2 of the International Residential Code, with the spacing and distances of fire hydrants indicated in Table C102.1 increased by 100%.

E. The following changes shall be made to Section 508, Fire Command Center:

1. Change Section 508.1 to read:

508.1 General. Where required by the applicable building code or where otherwise provided, a fire command center for fire department operations shall comply with Sections 508.1.1 through 508.1.6.

2. Delete Section 508.1.1.

3. Change Section 508.1.2 to read:

508.1.2 Separation. Fire-rated construction shall be maintained in accordance with Section 701.6 of this code.

4. Delete Section 508.1.3.

5. Change Section 508.1.4 to read:

508.1.4 Layout approval. A layout of the fire command center and all features shall be submitted for approval prior to modification.

6. Change Section 508.1.6 to read:

508.1.6 Required features. In addition to the features required by the applicable building code, the fire command center shall contain the following:

1. A telephone for fire department use with controlled access to the public telephone system.

2. Schematic building plans indicating the typical floor plan and detailing the building core, means of egress, fire protection systems, firefighter air-replenishment systems, firefighting equipment, and fire department access and the location of fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions.

3. An approved building information card that includes all of the following information:

3.1. General building information that includes property name, address, the number of floors in the building above and below grade, use and occupancy classification (for mixed uses, identify the different types of occupancies on each floor), and the estimated building population during the day, night, and weekend;

3.2. Building emergency contact information that includes a list of the building's emergency contacts, including building manager, building engineer, and their respective work phone numbers, cell phone numbers, and email addresses;

3.3. Building construction information that includes the type of building construction, including floors, walls, columns, and roof assembly;

3.4. Exit access stairway and exit stairway information that includes number of exit access stairways and exit stairways in building; each exit access stairway and exit stairway designation and floors served; location where each exit access stairway and exit stairway discharges; interior exit stairways that are pressurized; exit stairways provided with emergency lighting; each exit stairway that allows reentry; exit stairways providing roof access; elevator information that includes number of elevator banks, elevator bank designation, elevator car numbers, and respective floors that they serve; location of elevator machine rooms; control rooms and control spaces; location of sky lobby; and location of freight elevator banks;

3.5. Building services and system information that includes location of mechanical rooms, location of building management system, location and capacity of all fuel oil tanks, location of emergency generator, and location of natural gas service;

3.6. Fire protection system information that includes location of standpipes, location of fire pump room, location of fire department connections, floors protected by automatic sprinklers, and location of different types of automatic sprinkler systems installed, including dry, wet, and preaction; and

3.7. Hazardous material information that includes location and quantity of hazardous material.

4. Work table.

F. The following changes shall be made to Section 510, Maintenance of In-Building Emergency Communication Equipment:

Change Sections 510.1 through 510.3 and delete Sections 510.4 through 510.6, including subsections.

Sections 510.1 through 510.3 to read:

510.1 General. In-building emergency communication equipment shall be maintained in accordance with USBC and the provisions of this section.

510.2 Additional in-building emergency communications installations. If it is determined by the locality that increased amplification of their emergency communication system is needed, the building owner shall allow the locality access as well as provide appropriate space within the building to install and maintain necessary additional communication equipment by the locality. If the building owner denies the locality access, appropriate space, or both, the building owner shall be responsible for the installation and maintenance of these additional systems.

510.3 Field tests. After providing reasonable notice to the owner or the owner's representative, the fire official, police chief, or their agents shall have the right during normal business hours or another mutually agreed upon time to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the owner.

13VAC5-52-180. IFC Chapter 6 Building Services and Systems.

A. The following changes shall be made to Section 601, General:

1. Change Section 601.1 to read:

601.1 Scope. The provisions of this chapter shall apply to the operation and maintenance of fuel-fired appliances and heating systems, electrical systems and equipment, mechanical refrigeration systems, elevator recall, and commercial kitchen equipment.

2. Add Section 601.3 to read:

601.3 Permits. Permits shall be obtained for refrigeration systems as set forth in Section 107.2.

B. The following changes shall be made to Section 603, Electric Equipment, Wiring, and Hazards:

1. Change Sections 603.1, 603.1.1, and 603.2.1 to read:

603.1 General. Electrical equipment, wiring, and systems shall be maintained in accordance with this section and the applicable building code.

603.1.1 Equipment and wiring. Electrical equipment, wiring, devices, and appliances shall be maintained in accordance with this section and the applicable NFPA 70 standard.

603.2.1 Modified or damaged. Electrical wiring, devices, equipment, and appliances that are modified or damaged and constitute an electrical shock or fire hazard shall not be used until repaired or replaced in accordance with the applicable building code.

2. Change Sections 603.3 and 603.5 to read:

603.3 Illumination. Illumination shall be maintained for service equipment areas, motor control centers, and electrical panelboards.

603.5 Relocatable power taps and current taps. The construction and use of current taps and relocatable taps shall be in accordance with NFPA 70.

3. Change Section 603.8 to read:

603.8 Temporary wiring. Temporary wiring for electrical power and lighting installations not regulated by the applicable building code is allowed for a period not to exceed 90 days. Temporary wiring methods shall meet the applicable provisions of NFPA 70.

Exception: Temporary wiring for electrical power and lighting installations is allowed during periods of construction, remodeling, repair, or demolition of buildings, structures, equipment, or similar activities.

C. The following changes shall be made to Section 604, Elevator Operation, Maintenance, and Fire Service Keys:

1. Change Section 604.1 to read:

604.1 Operation. Existing elevators with a travel distance of 25 feet (7620 mm) or more shall comply with the requirements of Section 604.5.2 and the USBC, Part III, Maintenance.

2. Change Section 604.3 to read:

604.3 Standby power. In buildings and structures where standby power is required or furnished to operate an elevator, standby power shall be maintained in accordance with Section 1203. Operation of the system shall be in accordance with Sections 604.3.1 through 604.3.4.

3. Change Section 604.3.4 to read:

604.3.4 Machine room ventilation. Where standby power is connected to elevators, the machine room ventilation or air conditioning shall remain connected to the standby power source in accordance with the applicable building code.

4. Change Section 604.5.1 to read:

604.5.1 Fire service access elevator lobbies. Where fire service access elevators are required by the applicable building code, fire service access elevator lobbies shall be maintained free of storage and furniture.

5. Change Section 604.5.2 to read:

604.5.2 Occupant evacuation elevator lobbies. Where occupant evacuation elevators are provided in accordance with the applicable building code, occupant evacuation elevator lobbies shall be maintained free of storage and furniture.

6. Change Section 604.5.4 to read:

604.5.4 Water protection of hoistway enclosures. Methods to prevent water from infiltrating into a hoistway enclosure required by the applicable building code shall be maintained.

D. The following changes shall be made to Section 605, Fuel-Fired Appliances:

1. Change Section 605.1 to read:

605.1 Installation. The installation of nonportable fuel gas appliances and systems shall comply with the applicable building code. The use of all other fuel-fired appliances, other than internal combustion engines, oil lamps, and portable devices, such as blow torches, melting pots, and weed burners, shall comply with this section.

2. Change Section 605.1.1 to read:

605.1.1 Manufacturer's instructions. Appliances shall be installed, operated, and maintained in accordance with the manufacturer's instructions and applicable federal, state, and local rules and regulations. Where it becomes necessary to change, modify, or alter a manufacturer's instructions in any way, written approval shall first be obtained from the manufacturer.

3. Change Section 605.1.2 to read:

605.1.2 Electrical wiring and equipment. Electrical wiring and equipment used in connection with oil-burning equipment shall be maintained in accordance with Section 604 and the applicable NFPA 70 standard.

4. Change Section 605.1.4 to read:

605.1.4 Access. Appliances shall be readily accessible for cleaning hot surfaces; removing burners; and replacing motors, controls, air filters, chimney connectors, draft regulators, and other working parts and for adjusting, cleaning, and lubricating parts.

5. Change Section 605.1.5 to read:

605.1.5 Testing, diagrams and instructions. Following servicing or maintenance of oil-burning equipment, operation and combustion performance tests shall be conducted to determine that the burner is in proper operating condition and that all accessory equipment, controls, and safety devices function properly.

6. Change Section 605.1.5.1 to read:

605.1.5.1 Diagrams. Two copies of diagrams showing the main oil lines and controlling valves shall be provided, one copy of which shall be posted at the oil-burning equipment and another at an approved location that will be accessible in case of emergency.

7. Change Section 605.3 to read:

605.3 Chimneys. Masonry, metal, and factory-built chimneys shall be maintained in accordance with the applicable building code and NFPA 211.

8. Change Section 605.4 to read:

605.4 Fuel oil storage systems. Fuel oil storage systems shall be maintained in accordance with this section and the applicable building code.

9. Change Section 605.4.1 to read:

605.4.1 Fuel oil storage in outside, aboveground tanks. Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L) unless otherwise installed in accordance with the applicable building code. The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall be maintained in accordance with NFPA 31.

10. Change Section 605.4.2 to read:

605.4.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall be maintained in accordance with this section and the applicable building code.

11. Change Section 605.4.2.2 to read:

605.4.2.2 Quantity limits. One or more fuel oil storage tanks containing Class II or Class III combustible liquid shall be permitted to be stored in a building. Unless otherwise approved by the applicable building code, the aggregate capacity of all tanks shall not exceed the following:

1. 660 gallons (2498 L) in unsprinklered buildings, where stored in a tank complying with UL 80, UL 142, or UL 2085.

2. 1,320 gallons (4996 L) in buildings equipped with an automatic sprinkler system in accordance with the applicable NFPA 13 standard, where stored in a tank complying with UL 142.

3. 3,000 gallons (11,356 L) where stored in protected aboveground tanks complying with UL 2085 and the room is protected by an automatic sprinkler system in accordance with the applicable NFPA 13 standard.

12. Change Section 605.4.2.3 to read:

605.4.2.3 Restricted use and connection. Tanks subject to Section 605.4.2 shall be used only to supply fuel oil to fuel-burning equipment, generators or fire pumps installed in accordance with the applicable building code. Connections between tanks and equipment supplied by such tanks shall be maintained as closed piping systems.

13. Change Section 605.4.2.4 to read:

605.4.2.4 Applicability of maximum allowable quantity and control area requirements. The quantity of combustible liquid stored in tanks subject to Section 605.4.2 shall not be counted toward the maximum allowable quantity set forth in Section 5003.1.1, and such tanks shall not be required to be located in a control area when there are such allowances under the applicable building code.

14. Change Sections 605.4.2.5 and 605.4.2.7 and delete Section 605.4.2.6:

Change Sections 605.4.2.5 and 605.4.2.7 to read:

605.4.2.5 Installation. New or modified tanks and piping systems shall be approved by the building official in accordance with the applicable building code.

605.4.2.7 Spill control. Where provided or required in accordance with the applicable building code, spill control shall be maintained in accordance with Section 5703.4 and the applicable building code.

15. Change Section 605.4.2.8 to read:

605.4.2.8 Tanks in basements. Tanks in basements shall be maintained in accordance with the applicable building code.

16. Change Section 605.4.3 to read:

605.4.3 Underground storage of fuel oil. Underground storage tanks used for the storage of fuel oil shall be maintained and operated in accordance with the applicable building code and the applicable NFPA 31 standard.

17. Change Section 605.6 to read:

605.6 Heating appliances. Heating appliances shall be listed and shall comply with Sections 605.6.1 and 605.6.2.

18. Change Section 605.6.1 to read:

605.6.1 Guard against contact. The heating element or combustion chamber guard shall be maintained so as to prevent accidental contact by persons or material to the extent required by the applicable building code.

19. Change Section 605.6.2 to read:

605.6.2 Heating appliance maintenance. Heating appliances shall be maintained in accordance with the manufacturer's instructions, the applicable building code, and the applicable NFPA 31 standard.

20. Change Section 605.2.1 to read:

605.2.1 Chimneys and appliances. Chimneys, incinerators, smokestacks, or similar devices for conveying smoke or hot gases to the outer air and the stoves, furnaces, fireboxes, or boilers to which such devices are connected shall be maintained according to manufacturer's instructions, comply with the applicable building code, and be maintained so as to not create a fire hazard.

21. Change Section 605.2.1.1 to read:

605.2.1.1 Masonry chimneys. Masonry chimneys that upon inspection are found to be without a flue liner and that have open mortar joints that will permit smoke or gases to be discharged into the building or that are cracked as to be dangerous shall be repaired in accordance with the applicable building code.

22. Change Section 605.2.1.2 to read:

605.2.1.2 Metal chimneys. Metal chimneys or supports that are damaged or corroded shall be repaired or replaced.

23. Change Section 605.2.1.4 to read:

605.2.1.4 Factory-built chimneys. Existing factory-built chimneys or their supports that are damaged or corroded shall be repaired or replaced.

24. Change Section 605.2.1.5 to read:

605.2.1.5 Connectors. Existing chimney and vent connectors or their supports that are damaged or corroded shall be repaired or replaced.

25. Add a note to Section 605.2 to read:

Note: The fire code official may request a copy of the latest certificate of inspection from the Virginia Department of Labor and Industry for boilers and pressure vessels subject to such requirements. When the certificate is not available, the fire code official shall notify the Department of Labor and Industry to ensure that the required maintenance and testing is performed in accordance the Virginia Boiler and Pressure Vessel Regulations (16VAC25-50).

26. Change Section 605.8 to read:

605.8 Incinerators. Commercial, industrial, and residential-type incinerators and chimneys shall be installed in accordance with the applicable building code and maintained.

27. Change Section 605.8.1 to read:

605.8.1 Residential incinerators. Residential incinerators not regulated by the applicable building code shall be of an approved type.

28. Change Section 605.8.2 to read:

605.8.2 Spark arrestor. Incinerators not regulated by the applicable building code shall be equipped with an effective means for arresting sparks.

29. Delete Section 605.8.6.

E. The following changes shall be made to Section 606, Commercial Cooking Equipment and Systems:

1. Change Section 606.1 to read:

606.1 General. Commercial kitchen exhaust hoods shall comply with the requirements of this section.

2. Change Section 606.2 to read:

606.2 Commercial cooking operations. Where ventilation is provided or required by the applicable building code at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors, ventilation shall be operated and maintained. The fire code official is not authorized to require alteration or installation of a ventilation hood in accordance with Section 102.6 of the SFPC.

3. Change Section 606.3.3.3 to read:

606.3.3.3 Records. Records for inspections shall state the individual and company performing the inspection, a description of the inspection, and when the inspection took place. Records for cleanings shall state the individual and company performing the cleaning and when the cleaning took place. Such records shall be completed after each inspection or cleaning and maintained for a minimum of three years and be copied to the fire code official upon request.

4. Change Section 606.3.3.3.1 to read:

606.3.3.3.1 Tags. Where a commercial kitchen hood or duct system is inspected or cleaned, a tag containing the service provider name, address, telephone number, and date of service shall be provided in a conspicuous location. Prior tags shall be covered or removed.

Exception: Where records required by Section 606.3.3.3 are maintained on the premises.

F. The following change shall be made to Section 607, Commercial Cooking Oil Storage:

Change Section 607.7 to read:

607.7 Electrical equipment. Electrical equipment used for the operation of cooking oil storage systems shall comply be maintained in accordance with NFPA 70.

G. The following changes shall be made to Section 608, Mechanical Refrigeration:

1. Change Sections 608.1 and 608.1.2 and delete Section 608.1.1.

Sections 608.1 and 608.1.2 to read:

608.1 Scope. Refrigeration systems shall be maintained in accordance with the applicable building code.

608.1.2 Ammonia refrigeration. Refrigeration systems using ammonia refrigerant and the buildings in which such systems are installed shall comply with the applicable operating procedures of IIAR 7. Decommissioning of ammonia refrigeration systems shall comply with IIAR-8 and the applicable building code.

2. Change Section 608.3 to read:

608.3 Refrigerants. The use and purity of new, recovered, and reclaimed refrigerants shall be in accordance with the applicable building code.

3. Change Section 608.4 to read:

608.4 Refrigerant classification. Refrigerants shall be classified in accordance with the applicable building code.

4. Change Section 608.5 to read:

608.5 Change in refrigerant type. A change in the type of refrigerant in a refrigeration system shall be approved by the building official in accordance with the applicable building code.

5. Change Section 608.7 to read:

608.7 Testing of equipment. Refrigeration equipment and systems having a refrigerant circuit containing more than 220 pounds (100 kg) of Group A1 or 30 pounds (14 kg) of any other group refrigerant shall be subject to periodic testing in accordance with Section 608.7.1. Records of tests shall be maintained. Tests of emergency devices or systems required by the applicable building code shall be conducted by persons trained and qualified in refrigeration systems.

6. Change Section 608.8 to read:

608.8 Emergency signs. Refrigeration units or systems having a refrigerant circuit containing more than 220 pounds (100 kg) of Group A1 or 30 pounds (14 kg) of any other group refrigerant shall be provided with approved emergency signs, charts, and labels in accordance with NFPA 704. Hazard signs shall be in accordance with the applicable building code for the classification of refrigerants listed therein.

7. Change Sections 608.9 and 608.9.1 to read:

608.9 Refrigerant detection. Refrigerant detection systems shall be maintained. Where ammonia is used as the refrigerant, detection shall comply with IIAR 2. Detectors and alarms shall be maintained in approved locations. The detector shall transmit a signal to an approved location. For refrigerants other than ammonia, refrigerant detection shall comply with Section 608.9.1.

608.9.1 Refrigerants other than ammonia. Refrigerant detection systems required by the applicable building code shall be maintained. Detectors and alarms required by the applicable building code shall be maintained in approved locations. Unless otherwise permitted by the applicable building code, detection of a refrigerant concentration exceeding the upper detection limit or 25% of the lower flammable limit (LFL), whichever is lower, shall stop refrigerant equipment in the machinery room.

8. Change Section 608.10 to read:

608.10 Remote controls. Remote controls of the mechanical equipment and appliances located in the machinery room shall be maintained and remain accessible in accordance with the applicable building code at all times.

9. Change Section 608.10.1 to read:

608.10.1 Refrigeration system emergency shutoff. Where a clearly identified switch of an approved type is required by the applicable building code to provide off-only control of refrigerant compressors, refrigerant pumps, and normally closed automatic refrigerant valves located in the machinery room, the switch shall be maintained as approved. Unless otherwise permitted by the applicable building code, this equipment shall be maintained to automatically shut off when the refrigerant vapor concentration in the machinery room exceeds the vapor detector's upper detection limit or 25% of the LEL, whichever is lower.

10. Change Section 608.10.2 to read:

608.10.2 Ventilation system. Ventilation system switches shall be clearly identified and maintained in an approved manner.

11. Change Section 608.11 to read:

608.11 Emergency pressure control system. Emergency pressure control system provided for permanently installed refrigeration systems containing more than 6.6 pounds (3 kg) of flammable, toxic or highly toxic refrigerant or ammonia shall be maintained as installed in accordance with the applicable building code and this code.

12. Change Section 608.11.1 to read:

608.11.1 Automatic crossover valves. Automatic crossover valves shall be maintained as installed in accordance with the applicable building code.

13. Change Section 608.11.1.1 to read:

608.11.1.1 Overpressure limit set point. Automatic crossover valves shall be arranged and maintained in accordance with the applicable building code.

14. Change Section 608.11.1.2 to read:

608.11.1.2 Manual operation. Where provided or required in accordance with the applicable building code, manual operation of the automatic crossover valve shall be maintained.

15. Delete 608.11.1.3.

16. Change Section 608.11.2 to read:

608.11.2 Automatic emergency stop. An automatic emergency stop feature shall be maintained in accordance with the applicable building code.

17. Delete Section 608.11.2.1.

18. Delete Section 608.11.2.2.

19. Change Section 608.13 to read:

608.13 Discharge and termination of pressure relief and purge systems. Pressure relief devices, fusible plugs, and purge systems discharging to the atmosphere from refrigeration systems containing flammable, toxic, or highly toxic refrigerants or ammonia shall be maintained in accordance with Sections 608.13.2 through 608.13.4.

20. Change Section 608.13.1 to read:

608.13.1 Fusible plugs and rupture members. Unless otherwise required by the applicable building code, discharge piping and devices connected to the discharge side of a fusible plug or rupture member shall have provisions to prevent plugging the pipe in the event the fusible plug or rupture member functions.

21. Change Section 608.13.2 to read:

608.13.2 Flammable refrigerants. Unless otherwise regulated by the applicable building code, systems containing more than 6.6 pounds (3 kg) of flammable refrigerants having a density equal to or greater than the density of air shall discharge vapor to the atmosphere only through an approved treatment system in accordance with Section 608.13.5 or a flaring system in accordance with Section 608.13.6. Systems containing more than 6.6 pounds (3 kg) of flammable refrigerants having a density less than the density of air shall be permitted to discharge vapor to the atmosphere provided that the point of discharge is located outside of the structure at not less than 15 feet (4572 mm) above the adjoining grade level and not less than 20 feet (6096 mm) from any window, ventilation opening, or exit.

22. Change Section 608.13.3 to read:

608.13.3 Toxic and highly toxic refrigerants. Systems containing more than 6.6 pounds (3 kg) of toxic or highly toxic refrigerants that discharge vapor to the atmosphere shall discharge through a treatment system, flaring system, or other approved system in accordance with the applicable building code.

23. Change Section 608.13.4 to read:

608.13.4 Ammonia refrigerant. Systems containing more than 6.6 pounds (3 kg) of ammonia refrigerant that discharge vapor to the atmosphere shall discharge through a treatment system, flaring systems, ammonia diffusion systems, or other approved system in accordance with the applicable building code.

Exception: Ammonia/water absorption systems containing less than 22 pounds (10kg) of ammonia and for which the ammonia circuit is located entirely outdoors.

24. Change Sections 608.13.5 through 608.13.7 to read:

608.13.5 Treatment systems. Unless otherwise approved by the applicable building code, treatment systems shall be maintained and operated to reduce the allowable discharge concentration of the refrigerant gas to not more than 50% of the immediately dangerous to life and health (IDLH) level at the point of exhaust. Treatment systems shall be operated and maintained in accordance with Chapter 60 and the applicable building code.

608.13.6 Flaring systems. Flaring systems for incineration of flammable refrigerants shall be operated and maintained to incinerate the entire discharge. The products of refrigerant incineration shall not pose health or environmental hazards. Where required by the applicable building code, standby fuel, such as LP-gas, and standby power shall be maintained to have the capacity to operate for the required time for complete incineration of refrigerant in the system and any additional capacity required by the applicable building code. Standby electrical power, where required to complete the incineration process, shall be maintained in accordance with Section 1203.

608.13.7 Ammonia diffusion systems. Ammonia diffusion systems shall be maintained in accordance with the applicable building code.

25. Change Section 608.14 to read:

608.14 Mechanical ventilation exhaust. Treatment systems required by the applicable building code for exhaust from mechanical ventilation systems serving refrigeration machinery rooms containing flammable, toxic or highly toxic refrigerants, other than ammonia, capable of exceeding 25% of the LFL or 50% of the IDLH shall be operated and maintained.

Exception: Refrigeration systems containing Group A2L complying with Section 608.18.

26. Change Section 608.17 to read:

608.17 Electrical equipment. The hazardous location classification as determined in accordance with the applicable building code and the applicable NFPA 70 standard of refrigeration machinery rooms where refrigerants of Groups A2, A3, B2, and B3 are used, shall be maintained.

27. Change Sections 608.18 through 608.18.2 to read:

608.18 Special requirements for Group A2L refrigerant machinery rooms. Machinery rooms with systems containing Group A2L refrigerants shall comply with Sections 608.18.1 through. 608.18.3.

Exception: Machinery rooms conforming to the Class 1, Division 2 hazardous location classification requirements of NFPA 70.

608.18.1 Refrigerant detection system. Refrigerant detection systems in machinery rooms shall be maintained in accordance with the applicable building code.

608.18.2 Emergency ventilation system operation. An emergency ventilation system shall be maintained to operate at the minimum exhaust rate specified in accordance with the applicable building code. Means to manually shut down the system shall be maintained.

28. Delete Table 608.18.2 and change Section 608.18.3 to read:

608.18.3 Emergency ventilation system discharge. Where required by the applicable building code, the point of discharge to the atmosphere shall remain located outside of the structure and away from any window, ventilation opening, or exit.

H. Delete Section 610.1.1.

13VAC5-52-190. IFC Chapter 7 Fire and Smoke Protection Features.

A. The following changes shall be made to Section 701, General:

1. Change Section 701.1 to read:

701.1 Scope. The provisions of this chapter shall govern maintenance of the materials, systems, and assemblies used for structural fire resistance and fire-resistance-rated construction separation of adjacent spaces to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings.

2. Change Sections 701.6 and 701.7 to read:

701.6 Maintenance. The required fire-resistance rating of fire-resistance-rated construction, including walls, firestops, shaft enclosures, partitions, smoke barriers, floors, protected mass timber elements, fire-resistive coatings, and sprayed fire-resistant materials applied to structural members and fire-resistant joint systems shall be maintained. Such elements shall be visually inspected by the owner annually and properly repaired, restored, or replaced where damaged, altered, breached, or penetrated. Records of inspections and repairs shall be maintained. Where concealed, such elements shall not be required to be visually inspected by the owner unless the concealed space is accessible by the removal or movement of a panel, access door, ceiling tile, or similar movable entry to the space. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings, and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire-resistance-rated assemblies shall be protected by self-closing or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly.

Exception: When requested by the building owner and approved by the fire official, the visual inspection required by 701.6 may be modified to a time period greater than annually based on the history of the previous inspections.

701.7 Unsafe conditions. Where any components in this chapter are not maintained and do not function as intended or do not have the fire resistance required by the code under which the building was constructed, remodeled, or altered, such components or portion thereof shall be deemed an unsafe condition in accordance with Section 110.1. Components or portions thereof determined to be unsafe shall be repaired or replaced to conform to that code under which the building was constructed, remodeled, or altered or this chapter, as deemed appropriate by the fire code official.

Where the extent of the conditions of components is such that any building, structure, or portion thereof presents an imminent danger to the occupants of the building, structure, or portion thereof, the fire code official shall act in accordance with Section 110.5.

B. The following change shall be made to Section 704, Joints and Voids:

Change Section 704.3 to read:

704.3 Opening protectives. Where openings are required to be protected, opening protectives and associated closing devices shall be maintained as self-closing or automatic-closing in accordance with Section 705.2.

C. The following changes shall be made to Section 705, Door and Window Openings:

1. Change Section 705.2.5 to read:

705.2.5 Smoke-activated and heat-activated doors. Smoke-activated doors shall be maintained to self-close or automatically close upon detection of smoke in accordance with the applicable building code.

2. Change Section 705.2.6 to read:

705.2.6 Testing. Opening protectives shall be inspected and tested annually in accordance with NFPA 80 to confirm proper operation and full closure. A written

record shall be maintained and be available to the fire code official.

13VAC5-52-200. IFC Chapter 8 Interior Finish, Decorative Materials and Furnishings.

A. Change Section 801.1 to read:

801.1 Scope. The provisions of this chapter shall govern interior finish, interior trim, furniture, furnishings, decorative materials, and decorative vegetation in buildings.

B. Change the title of Section 803 and Section 803.1 to read:

Section 803 Interior Wall and Ceiling Finish and Trim in Buildings.

803.1 General. The provisions of this section shall apply to the maintenance of interior wall and ceiling finishes and interior wall and ceiling trim in existing buildings in accordance with the applicable building code.

C. Change Section 803.1.1 to read:

803.1.1 Classification. Interior wall or ceiling finishes shall be classified and tested in accordance with the applicable building code.

D. Change Section 803.1.1.1 to read:

803.1.1.1 Manufacturer's product information and testing reports. Manufacturer's product information and testing reports shall be furnished to the fire official upon request.

E. Delete Sections 803.1.2 and 803.1.3.

F. Change Sections 803.2 and 803.3 to read:

803.2 Stability. Interior finish materials regulated by this chapter shall remain applied or otherwise fastened in accordance with the applicable building code.

803.3 Interior finish requirements. Interior wall and ceiling finish shall have a flame spread index not greater than that approved under the applicable building code. New interior finish shall not be installed unless approved by the building official in accordance with the applicable building code.

G. Delete Table 803.3.

H. Change Section 803.5 to read:

803.5 Textile wall coverings. Where used as interior wall or ceiling finish materials, textiles, including materials having woven or nonwoven, napped, tufted, looped, or similar surface shall comply with the requirements of the applicable building code. Newly introduced materials shall not be installed unless approved by the building official.

I. Delete Sections 803.5.1, 803.5.1.1, and 803.5.2.

J. Change Sections 803.6, 803.7, 803.8, 803.9, 803.10, and 803.11 to read:

803.6 Textile ceiling coverings. Where used as interior wall or ceiling finish materials, textiles, including materials having woven or nonwoven, napped, tufted, looped, or similar surface, shall comply with the requirements of the applicable building code. Newly introduced materials shall not be installed unless approved by the building official.

803.7 Expanded vinyl wall coverings. Expanded vinyl wall coverings shall be maintained in accordance with the applicable building code. Newly introduced materials shall not be installed unless approved by the building official.

803.8 Expanded vinyl ceiling coverings. Expanded vinyl ceiling coverings shall be maintained in accordance with the applicable building code. Newly introduced materials shall not be installed unless approved by the building official.

803.9 High-density polyethylene (HDPE) and polypropylene (PP). Where high-density polyethylene or polypropylene is used as an interior finish, it shall comply with the applicable building code. Newly introduced materials shall not be installed unless approved by the building official.

803.10 Site-fabricated stretch systems. Where used as newly installed interior wall or interior ceiling finish materials, site-fabricated stretch systems containing all three components described in the definition in Chapter 2 shall not be installed unless approved by the building official in accordance with the applicable building code.

803.11 Foam plastic materials. Foam plastic materials shall not be used as interior wall and ceiling finish or interior trim unless specifically allowed by the building official in accordance with the applicable building code.

K. Delete Sections 803.11.1 and 803.11.2 and change Sections 803.12 through 803.15 to read:

803.12 Facings or wood veneers intended to be applied on site over a wood substrate. Facings or veneers intended to be applied on site over a wood substrate shall be maintained in accordance with the applicable building code.

803.13 Laminated products factory produced with an attached wood substrate. Laminated products factory produced with an attached wood substrate shall be maintained in accordance with the applicable building code.

803.14 Thickness exemption. Materials having a thickness less than 0.036 inch (0.9mm) applied to the surface of walls or ceilings shall not be subject to interior finish requirements.

803.15 Heavy timber exemption. Exposed portions of buildings elements complying with the requirements of Type IV construction in accordance with the applicable building code shall not be subject to interior finish requirements.

L. Change the title of Section 804 and Section 804.1 to read:

Section 804 Interior Wall and Ceiling Trim and Interior Floor Finish in Buildings

804.1 Interior trim. Combustible trim, as defined by the applicable building code, excluding handrails and guardrails, shall be maintained. Newly introduced materials shall not be installed unless approved by the building official.

M. Delete Sections 804.1.1 and 804.1.2.

N. Change Section 804.2 to read:

804.2 Foam plastic. Foam plastic used as interior trim shall be maintained in accordance with the applicable building code. Newly introduced materials shall not be installed unless approved by the building official.

O. Delete Sections 804.2.1 through 804.2.4.

P. Delete Sections 804.3.2 through 804.4. Change Sections 804.3 through 804.3.1; and add Section 804.3.1.1 to read:

804.3 Interior floor finish. Interior floor finish and floor covering materials shall be maintained in accordance with the applicable building code.

804.3.1 Classification. Interior floor finish and floor covering materials shall be classified in accordance with the applicable building code.

804.3.1.1. Manufacturer's product information and testing reports. Manufacturer's product information and testing reports shall be furnished to the fire official upon request.

Q. Change the title of Section 805 and Sections 805.1.1.2, 805.1.2.2, 805.2.1.2, 805.2.2.2, 805.4.1.2, and 805.4.2.2 to read:

Section 805 Upholstered Furniture and Mattresses in Buildings

805.1.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537 or California Technical Bulletin 133, as follows:

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 megajoules (MJ).

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

805.1.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E 1590 or California Technical Bulletin 129, as follows:

1. The peak rate of heat release for the single mattress shall not exceed 100 kW.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single mattress during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

805.2.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537 or California Technical Bulletin 133, as follows:

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

805.2.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E 1590 or California Technical Bulletin 129, as follows:

1. The peak rate of heat release for the single mattress shall not exceed 100 kW.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single mattress during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

805.4.1.2 Heat release rate. Newly introduced upholstered furniture shall have limited rates of heat release when tested in accordance with ASTM E 1537 or California Technical Bulletin 133, as follows:

1. The peak rate of heat release for the single upholstered furniture item shall not exceed 80 kW.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single upholstered furniture item during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Upholstered furniture in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

805.4.2.2 Heat release rate. Newly introduced mattresses shall have limited rates of heat release when tested in accordance with ASTM E 1590 or California Technical Bulletin 129, as follows:

1. The peak rate of heat release for the single mattress shall not exceed 100 kW.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

2. The total energy released by the single mattress during the first 10 minutes of the test shall not exceed 25 MJ.

Exception: Mattresses in rooms or spaces protected by an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

R. Change the title of Section 806 and Exception 1 in Section 806.1.1 and add Exception 3 in Section 806.1.1 to read:

Section 806 Natural Decorative Vegetation in Buildings

1. Trees located in areas protected by an automatic sprinkler system in accordance with the applicable NFPA 13 standard shall not be prohibited in Groups A, E, M, R-1, and R-2.

3. Trees shall be permitted in places of worship in Group A occupancies.

S. Change the title of Section 807 and Exceptions 1 and 2 in Section 807.2 to read:

Section 807 Decorative Materials and Artificial Decorative Vegetation in Buildings

1. In auditoriums in Group A, the permissible amount of curtains, draperies, fabric hangings, and similar combustible decorative materials suspended from walls or ceilings shall not exceed 75% of the aggregate wall area where the building is equipped throughout with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard and where the material is installed in accordance with the applicable building code.

2. In Group R-2 dormitories, within sleeping units and dwelling units, the permissible amount of curtains, draperies, fabric hangings, and similar decorative materials suspended from walls or ceilings shall not exceed 50% of the aggregate wall areas where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

T. Change the Exception to 807.4 to read:

Exception: Testing of artificial vegetation is not required in Group I-1; Group I-2, Condition 1; Group R-2; Group R-3; or Group R-4 occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard, where such artificial vegetation complies with the following:

1. Wreaths or other decorative items on doors shall not obstruct the door operation and shall not exceed 50% of the surface area of the door.

2. Decorative artificial vegetation shall be limited to not more than 30% of the wall area to which it is attached.

3. Decorative artificial vegetation not on doors or walls shall not exceed three feet (914 mm) in any dimension.

U. Change Section 807.5.1.2 and Exceptions 1 and 2 (Exception 3 remains) of Section 807.5.2.1 to read:

807.5.1.2 Motion picture screens. The screens upon which motion pictures are projected in buildings of Group A shall either meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall comply with the requirements for a Class B interior finish in accordance with the applicable building code.

1. Corridors protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

2. Corridors protected by an approved fire alarm system installed in accordance with the applicable NFPA 72 standard.

V. Change Sections 807.5.3.1 through 807.5.3.4 and 807.5.4 to read:

807.5.3.1 Group I-1 and Group I-2 Condition 1 within units. In Group I-1 and Group I-2 Condition 1 occupancies, equipped with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard, within sleeping units and dwelling units, combustible decorative materials placed on walls shall be limited to not more than 50% of the wall area to which they are attached.

807.5.3.2 In Group I-1 and Group I-2 Condition 1 for areas other than within units. In Group I-1 and Group I-2 Condition 1 occupancies, equipped with an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard, combustible decorative materials placed on walls in areas other than within dwelling and sleeping units shall be limited to not more than 30% of the wall area to which they are attached.

807.5.3.3 In Groups I-2 Condition 2. In Group I-2 Condition 2 occupancies, equipped with an approved automatic sprinkler system installed in accordance with the applicable NFPA 13 standard, combustible decorative materials placed on walls shall be limited to not more than 30% of the wall area to which they are attached.

807.5.3.4 Other areas in Groups I-1 and I-2. In Group I-1 and I-2 occupancies, in areas not equipped with an approved automatic sprinkler system, combustible decorative materials shall be of such limited quantities that a hazard of fire development or spread is not present.

807.5.4 Group I-3. In Group I-3, combustible decorative materials are prohibited.

Exception:

Cell areas in buildings equipped throughout with an automatic sprinkler system in accordance with the applicable NFPA 13 standard where a maximum four-square-foot area has been demarcated on the wall for personal items 0.025 inch (0.64 mm) or less in thickness applied directly to and adhering to the wall.

W. Change Exception 1 (Exceptions 2 and 3 remain) of Section 807.5.5.1 to read:

1. Corridors protected by an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

X. Change the title of Section 808 and Sections 808.1, 808.2, 808.4, and 808.5 to read:

Section 808 Furnishings Other Than Upholstered Furniture and Mattresses or Decorative Materials in Buildings

808.1 Wastebaskets and linen containers in Groups I-1, I-2, and I-3 occupancies and Group B ambulatory care facilities. Wastebaskets, linen containers, and other waste containers, including their lids, located in Groups I-1, I-2, and I-3 occupancies shall be constructed of noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m^2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m^2 in the horizontal orientation. Metal wastebaskets and other metal waste containers with a capacity of 20 gallons (75.7 L) or more shall be listed in accordance with UL 1315 and shall be provided with a noncombustible lid. Portable containers exceeding 32 gallons (121 L) shall be stored in an area classified as a waste and linen collection room and constructed in accordance with the applicable building code.

Exception: Recycling containers complying with Section 808.1.2 are not required to be stored in waste and linen collection rooms.

808.2 Waste containers with a capacity of 20 gallons or more in Group R-2 college and university dormitories. Waste containers, including their lids, located in Group R-2 college and university dormitories with a capacity of 20 gallons (75.7 L) or more shall be constructed of noncombustible materials or of materials that meet a peak rate of heat release not exceeding 300 kW/m^2 when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m^2 in the horizontal orientation. Metal wastebaskets and other metal waste containers with a capacity of 20 gallons (75.7 L) or more shall be listed in accordance with UL 1315 and shall be provided with a noncombustible lid. Portable containers exceeding 32 gallons (121 L) shall be stored in an area classified as a waste and linen collection room constructed in accordance with the applicable building code.

808.4 Combustible lockers. Where lockers constructed of combustible materials are used, the lockers shall be considered to be interior finish and shall be approved by the building official in accordance with the applicable building code.

Exception: Lockers constructed entirely of wood and noncombustible materials shall be permitted to be used wherever interior finish materials are required to meet Class C classification in accordance with the applicable building code.

808.5 Play structures. Play structures shall be maintained in accordance with the applicable building code.

13VAC5-52-210. IFC Chapter 9 Fire Protection Systems.

A. The following changes shall be made to Section 901, General:

1. Change Section 901.1 to read:

901.1 Scope. The provisions of this chapter shall apply to the inspection, operation, testing, and maintenance of all fire protection systems.

2. Delete Sections 901.2 and 901.2.1.

3. Change Section 901.3 to read:

901.3 Permits. Permits shall be required as set forth in Section 107.2.

4. Change Sections 901.4 and 901.4.1 to read:

901.4 Maintenance and alterations. Fire protection and life safety systems shall be maintained in accordance with the original installation standards for that system. Alterations and repairs to fire protection systems shall be done in accordance with the applicable building code and the applicable standards.

901.4.1 Required fire protection systems. Fire protection systems shall be repaired, operated, tested, and maintained in accordance with this code. A fire protection system for which a design option, exception, or reduction to the provisions of this code or the applicable building code has been granted shall be considered to be a required system.

5. Change Section 901.4.2 to read:

901.4.2 Nonrequired fire protection systems. Nonrequired fire protection systems shall be maintained to function as originally installed. If any such systems are to be reduced in function or discontinued, approval shall be obtained from the building official in accordance with Section 103.3.1 of Part I of the USBC (13VAC5-63-30 E).

6. Change Section 901.4.3 to read:

901.4.3 Alterations in buildings and structures. For any alteration within a building or structure, the existing fire protection and life safety systems shall be maintained to continue protection while the building or structure is occupied. Persons shall not remove or modify any fire protection or life safety system without approval from the building official in accordance with the applicable building code.

7. Change Section 901.4.4 to read:

901.4.4 Fire areas. Where buildings or portions thereof are divided into fire areas so as not to exceed the limits established for requiring a fire protection system in accordance with the applicable building code, such fire areas shall be maintained in accordance with Chapter 7 and the applicable building code.

8. Delete Section 901.4.5.

9. Change Sections 901.4.7, 901.4.7.3, and 901.4.7.4 and add Section 901.4.8 to read:

901.4.7 Pump and riser room size. Where provided, fire pump rooms and automatic sprinkler system riser rooms shall maintain clearances around equipment to elements of permanent construction, including other installed equipment and appliances, and shall be sufficient to allow inspection, service, repair, or replacement without removing such elements of permanent construction or disabling the function of a required fire-resistance-rated assembly. Passageways provided for the removal of equipment shall remain unobstructed.

901.4.7.3 Environment. Suitable means shall be provided for maintaining the temperature in automatic sprinkler system riser rooms and fire pump rooms above 40°F (5°C).

901.4.7.4 Lighting. Permanently installed artificial illumination in automatic sprinkler system riser rooms and fire pump rooms shall be maintained in accordance with the applicable building code.

901.4.8 Maintenance of walls and ceilings. Where building components such as walls, ceilings, and ceiling tiles are required by the installation standard for an existing fire protection system, such building components shall be maintained in accordance with the applicable building code.

10. Change Section 901.5.1 to read:

901.5.1 Occupancy. In buildings where a fire protection system is required by this code or the applicable building code, it shall be unlawful to occupy any portion of a building or structure until the fire protection system installation has been tested and approved by the building official.

11. Add Section 901.5.2 to read:

901.5.2 Hydrant and fire service main acceptance testing. Fire hydrant systems and private fire service mains shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing.

12. Change Section 901.6 to read:

901.6 Inspection, testing, and maintenance. Equipment, systems, devices, and safeguards, such as fire detection, alarm, and extinguishing systems that were provided and approved by the building official when constructed, shall be maintained in an operative condition at all times. Where such equipment, systems, devices, and safeguards are not found to be in an operative condition, the fire official shall order all such equipment to be rendered safe in accordance with the USBC.

13. Add Section 901.6.3.2 to read:

901.6.3.2 Annual inspection tag or sticker. When an annual inspection or test required by Section 901.6.1 is completed, an inspection tag or sticker shall be attached to each fire protection system near the main control valve, main panel, or other such appropriate and visible location as determined by the fire code official. Tag requirements for all other inspections shall be in accordance with the applicable reference standard. The annual inspection tag or sticker required by this section shall contain the following information:

1. The name of the agency and individual performing the work.

2. Date of inspection or test.

3. Type of inspection or test.

4. Result of the inspection or test.

14. Add Section 901.7.7 to read:

901.7.7 Modifications during impairment. The fire code official is authorized to require safeguards in a building or fire area when the required fire protection is out of service. Those safeguards may be based upon the provisions of the applicable building code or other recognized safety standards.

15. Change Section 901.8 to read:

901.8 Removal of or tampering with equipment. It shall be unlawful for any person to remove, tamper with, or otherwise disturb any fire hydrant, fire detection and alarm system, fire suppression system, or other fire appliance

required by this code or the applicable building code except for the purpose of extinguishing fire, for training purposes, for recharging or making necessary repairs, or where approved by the fire code official.

16. Change Section 901.8.2 to read:

901.8.2 Removal of existing occupant-use hose lines. The fire code official is authorized to permit the removal of existing occupant-use hose lines where all of the following conditions exist:

1. Installation is not required by this code or the applicable building code.

2. The hose line would not be utilized by trained personnel or the fire department.

3. The remaining outlets are compatible with local fire department fittings.

17. Add Section 901.11 to read:

901.11 Defective equipment. When the fire official determines through investigation, testing, or reports by a nationally recognized testing agency that specific, required water sprinkler or water-spray extinguishing equipment has been identified as failing to perform or operate through not less than 30 randomly selected sprinkler heads at four or more building sites anywhere in the nation, the fire official shall order all such equipment to be rendered safe.

B. The following changes shall be made to Section 903, Automatic Sprinkler Systems:

1. Delete Sections 903.1.1 through 903.2.11.1.3, including tables.

2. Change Section 903.2.11.2 to read:

903.2.11.2 Rubbish and linen chutes. Access to automatic sprinkler systems shall be maintained for servicing of the automatic sprinkler system components.

3. Delete Sections 903.2.11.3 through 903.2.11.6, including tables.

4. Change Sections 903.2.12 and 903.3 to read:

903.2.12 During construction and demolition. Automatic sprinkler systems required by the applicable building code during construction, alteration, and demolition operations shall be maintained in accordance with Chapter 33.

903.3 Installation and maintenance requirements. Automatic sprinkler systems shall be approved by the building official and installed in accordance with the applicable building code. Automatic sprinkler systems shall be maintained in accordance with Section 901.6.

5. Delete Sections 903.3.1 through 903.3.5.2.

6. Change Section 903.3.6 to read:

903.3.6 Hose threads. Fire hose threads and fittings used in connection with automatic sprinkler systems shall be maintained as approved by the fire code official.

7. Change Sections 903.3.7 and 903.3.8.1 and delete Sections 903.3.8 and 903.3.8.2 through 903.3.8.4.

903.3.7 Fire department connections. Fire department connections shall be maintained in accordance with Section 912.

903.3.8.1 Limited area sprinkler systems. Limited area sprinkler systems shall be maintained in accordance with the NFPA 25.

8. Change Section 903.3.8.5 to read:

903.3.8.5 Calculations. When required by inspections, testing, and maintenance provisions of NFPA 25, hydraulic calculations shall be provided to demonstrate that the available water flow and pressure are adequate to supply all sprinklers installed in any single fire area with discharge densities corresponding to the hazard classification.

9. Delete Sections 903.4.1 through 903.4.3. Change Section 903.4 to read:

903.4 Sprinkler system supervision and alarms. All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures, water-flow switches, and alarms on all sprinkler systems shall remain in service in the normal position and properly sealed, locked, or electrically supervised in accordance with the applicable building code.

10. Change Section 903.6 to read:

903.6 Where required in existing buildings and structures. An automatic sprinkler system shall be provided in existing buildings and structures in accordance with Section 102.7 of this code.

C. The following changes shall be made to Section 904, Alternative Automatic Fire-Extinguishing Systems:

1. Change Sections 904.1 and 904.1.1 to read:

904.1 General. Automatic fire-extinguishing systems, other than automatic sprinkler systems, shall be inspected, tested, and maintained in accordance with the provisions of this section and the applicable referenced standards.

904.1.1 Certification of service personnel for fire-extinguishing equipment. Service personnel providing or conducting maintenance on automatic fire-extinguishing systems, other than automatic sprinkler systems, shall possess a valid certificate issued by an approved agency or other approved organization for the type of system and work performed.

2. Delete Section 904.2.1.

3. Change Sections 904.2, 904.3, and 904.3.1 to read:

904.2 Electrical wiring. Electrical wiring shall be maintained in accordance with NFPA 70.

904.3 Commercial hood and duct systems in mobile food preparation vehicles. Each required commercial kitchen exhaust hood and duct system required by Section 319.4 for mobile food preparation vehicles to have a Type I hood shall be protected with an approved automatic fire-extinguishing system installed in accordance with this code.

904.3.1 Installation. Automatic fire-extinguishing systems shall be installed in accordance with Annex B of NFPA 96 when required in mobile food preparation vehicles.

4. Delete Sections 904.3.2, 904.3.3, 904.3.4, 904.3.5, and 904.4.1 through 904.4.3 and change Section 904.4 to read:

904.4 Warning signs. Where alarms are required to indicate the operation of automatic fire-extinguishing systems, warning signs shall be maintained to warn of pending agent discharge. Where exposure to automatic-extinguishing agents poses a hazard to persons and a delay is required to ensure the evacuation of occupants before agent discharge, a separate warning sign shall be maintained in accordance with the applicable building code.

5. Change Section 904.5 to read:

904.5 Wet-chemical systems. Wet-chemical extinguishing systems shall be maintained, periodically inspected, and tested in accordance with NFPA 17A and their listing. Records of inspections and testing shall be maintained.

6. Change Section 904.6 to read:

904.6 Dry-chemical systems. Dry-chemical extinguishing systems shall be maintained, periodically inspected and tested in accordance with NFPA 17 and their listing. Records of inspections and testing shall be maintained.

7. Change Section 904.7 to read:

904.7 Foam systems. Foam-extinguishing systems shall be maintained, periodically inspected, and tested in accordance with NFPA 11 and NFPA 16 and their listing. Records of inspections and testing shall be maintained.

8. Change Section 904.8 to read:

904.8 Carbon dioxide systems. Carbon dioxide extinguishing systems shall be maintained, periodically inspected and tested in accordance with NFPA 12 and their listing. Records of inspections and testing shall be maintained.

9. Change Section 904.9 to read:

904.9 Halon systems. Halogenated extinguishing systems shall be maintained, periodically inspected, and tested in accordance with NFPA 12A and their listing. Records of inspections and testing shall be maintained.

10. Change Section 904.10 to read:

904.10 Clean-agent systems. Clean-agent fire-extinguishing systems shall be maintained, periodically inspected, and tested in accordance with NFPA 2001 and their listing. Records of inspections and testing shall be maintained.

11. Change Section 904.11 to read:

904.11 Automatic water mist systems. Automatic water mist systems shall be maintained in accordance with NFPA 25 and the manufacturer's instructions.

12. Delete Sections 904.11.1.1 through 904.11.2.3.

13. Change Section 904.12 to read:

904.12 Aerosol fire-extinguishing systems. Aerosol fire-extinguishing systems shall be periodically inspected, tested, and maintained in accordance with this section, NFPA 2010, and with their listing. Such devices and appurtenances shall be maintained in compliance with manufacturer's instructions.

14. Change Sections 904.13 through 904.13.2 to read:

904.13 Commercial cooking systems. Automatic fire-extinguishing systems for commercial cooking shall comply with this section.

904.13.1 Manual system operation. Where provided, manual actuation devices shall be maintained as installed in accordance with the applicable building code and shall not be obstructed.

904.13.2 System interconnection. Where required by the applicable building code, the actuation of the fire extinguishing system shall automatically shut down the fuel or electrical power supply to the cooking equipment. The fuel and electrical supply reset shall be manual.

15. Delete Sections 904.13.3 through 904.13.4.

16. Change Section 904.13.4.1 to read:

904.13.4.1 Listed sprinklers. Sprinklers replaced in accordance with NFPA 25, which are used for the protection of fryers, shall be tested in accordance with UL 199E, listed for that application, and installed in accordance with their listing.

17. Change Section 904.13.5.1 to read:

904.13.5.1 Existing automatic fire-extinguishing systems. Where a change in the cooking media, positioning of cooking equipment, or replacement of cooking equipment occurs in existing commercial cooking systems, the automatic fire-extinguishing system shall be required to comply with the applicable building code.

18. Delete Sections 904.14 through 904.14.1.2.

D. The following changes shall be made to Section 905, Standpipe Systems:

1. Change Sections 905.1 and 905.2 to read:

905.1 General. Standpipe systems shall be inspected, tested, and maintained in accordance with the provisions of this section and the applicable referenced standards.

905.2 Maintenance standard. Standpipe systems shall be maintained in accordance with this section and NFPA 25 and as approved in accordance with the applicable building code, including the applicable NFPA 14 standard. Hose connections shall be maintained so that there is at least three inches (76.2 mm) clearance between any adjacent object and the handle of the valve when the valve is in any position ranging from fully open to fully closed. Fire department connections for standpipe systems shall be in accordance with Section 912.

2. Delete Sections 905.3 through 905.3.4.

3. Change Section 905.3.4.1 to read:

905.3.4.1 Stage hose and cabinet. Where required by the applicable building code, stages greater than 1,000 square feet in area (93 m2) with hose connections shall be maintained with sufficient lengths of 1-1/2-inch (38 mm) hose to provide fire protection for the required area.

Hoses shall be maintained with an adjustable fog nozzle mounted in a cabinet or on a rack approved by the fire code official. Each rack for 1-1/2-inch (38 mm) or smaller hose shall be provided with a label that includes the wording "FIRE HOSE FOR USE BY TRAINED PERSONNEL" and operating instructions.

4. Delete Sections 905.3.5 and 905.3.6.

5. Delete Section 905.3.7.

6. Delete Sections 905.3.8 through 905.5.2.

7. Change Section 905.5.3 to read:

905.5.3 Class II system. Each rack for 1-1/2 inch (38 mm) or smaller hose shall be provided with a label that includes the wording "FIRE HOSE FOR USE BY TRAINED PERSONNEL" and operating instructions. A minimum one-inch (25 mm) hose shall be allowed to be used for hose stations in light-hazard occupancies where investigated and listed for this service and where approved by the fire code official.

8. Delete Sections 905.6 through 905.6.2.

9. Delete Section 905.8 and change Section 905.9 to read:

905.9 Valve supervision. Valves controlling water supplies shall be maintained as supervised in accordance with the applicable building code. Where a fire alarm system is provided, a supervisory signal shall also be transmitted to the control unit.

Exceptions:

1. Valves to underground key or hub valves in roadway boxes provided by the municipality or public utility do not require supervision.

2. Valves locked in the normal position and inspected as permitted in the applicable building code in buildings not equipped with a fire alarm system.

10. Change Section 905.10 to read:

905.10 During construction. Standpipe systems required during construction and demolition operations shall comply with Chapter 33.

11. Delete Section 905.12.

E. The following changes shall be made to Section 906, Portable Fire Extinguishers:

1. Change Item 1 in Section 906.1 to read:

1. In Groups A, B, E, F, H, I, M, R-1, R-4, and S occupancies.

Exceptions:

1. In Groups A, B, and E occupancies equipped throughout with quick response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.

2. In Group I-3 occupancies, portable fire extinguishers shall be permitted to be located at staff locations and the access to such extinguishers shall be permitted to be locked.

2. Add a note to Section 906.1 to read:

Note: In existing buildings, whether fire extinguishers are needed is determined by the USBC or other code in effect when such buildings were constructed.

3. Change Section 906.2.1 to read:

906.2.1 Certification of service personnel for portable fire extinguishers. Service personnel providing or conducting maintenance on portable fire extinguishers shall possess a valid certificate issued by an approved agency or other approved organization for the type of work performed.

F. The following changes shall be made to Section 907, Fire Alarm and Detection Systems:

1. Change Section 907.1 to read:

907.1 General. This section covers the performance and maintenance of fire alarm systems and their components in buildings and structures.

2. Delete Sections 907.1.1 and 907.1.2.

3. Change Section 907.1.3 to read:

907.1.3 Equipment. Systems and components not regulated by the applicable building code shall be listed and approved for the purpose for which they are installed.

4. Delete Sections 907.2 through 907.2.6.3.2.

5. Delete Sections 907.2.6.3.3 through 907.2.10.

6. Change Section 907.2.11 to read:

907.2.11 Single-station and multiple-station smoke alarms. Alarms not required by the applicable building code shall be listed single-station and multiple-station smoke alarms complying with UL 217 and installed in accordance with the manufacturer's instructions and NFPA 72.

7. Delete Sections 907.2.11.1 through 907.3.1.

8. Change Sections 907.3.2 and 907.3.3 to read:

907.3.2 Special locking systems. Where special locking systems are installed on means of egress doors, the associated fire detection system shall also be maintained in accordance with NFPA 72 and the applicable building code.

907.3.3 Elevator emergency operation. Automatic fire detectors installed for elevator emergency operation shall be maintained in accordance with the provisions of the applicable ASME A17.1/CSA B44 standard, NFPA 72, and the applicable building code.

9. Delete Sections 907.3.4 through 907.4.1.

10. Change Section 907.4.2 to read:

907.4.2 Manual fire alarm boxes. Where a manual fire alarm system is provided or required by the applicable building code, fire alarm boxes shall be maintained in accordance with this Section.

11. Delete Sections 907.4.2.1 and 907.4.2.2.

12. Change Sections 907.4.2.3 and 907.4.2.5 to read:

907.4.2.3 Color. Unless otherwise approved by the applicable building code, manual fire alarm boxes shall be maintained red in color.

907.4.2.5 Protective covers. The fire code official is authorized to require the installation of listed manual fire alarm box protective covers to prevent malicious false alarms or to provide the manual fire alarm box with protection from physical damage. The protective cover shall be transparent or red in color with a transparent face to permit visibility of the manual fire alarm box. Each cover shall include proper operating instructions. A protective cover that emits a local alarm signal shall not be installed unless approved. Protective covers shall not reduce the required means of egress width.

13. Delete Sections 907.4.3 and 907.4.3.1 and change Section 907.5 to read:

907.5 Occupant notification systems. Fire alarm system annunciation and occupant notification required by the applicable building code shall be maintained.

14. Change Sections 907.5.1 and 907.5.1.1 to read:

907.5.1 Audible alarms. The distinct sound emitted by audible alarm notification appliances and approved in accordance with the applicable building code is not to be used for any purposes other than that of a fire alarm. The required audibility and intelligibility of alarms shall be maintained in accordance with the applicable building code.

907.5.1.1 Pre-signal feature. A pre-signal feature shall not be utilized unless approved by the fire code official and the fire department. Where a pre-signal feature is provided, a signal shall be annunciated at a constantly attended location approved by the fire department so that occupant notification can be activated in the event of fire or other emergency.

15. Delete Sections 907.5.2.1 through 907.5.2.2.2 and change the title of Section 907.5.2.2.3 to read:

907.5.2.2.3 Alternative uses for emergency voice or alarm communication systems.

16. Change Section 907.5.2.2.4 to read:

907.5.2.2.4 Emergency voice or alarm communication captions. Where stadiums, arenas, and grandstands are required to caption audible public announcements in accordance with of the applicable building code, the emergency or voice alarm communication system shall be captioned. Prerecorded or live emergency captions shall be from an approved location constantly attended by personnel trained to respond to an emergency.

17. Delete Sections 907.5.2.2.5 through 907.6.2.

18. Change Section 907.6.3 to read:

907.6.3 Initiating device identification. Fire alarm systems that identify the specific initiating device address, location, device type, floor level where applicable, and status, including indication of normal, alarm, trouble, and supervisory status, shall maintain accurate programming in accordance with NFPA 72 and the applicable building code.

19. Delete Sections 907.6.3.1 through 907.6.4.2.

20. Change Sections 907.6.5 through 907.6.6 to read:

907.6.5 Access. Access shall be maintained to each fire alarm device and notification appliance for periodic inspection, maintenance, and testing.

907.6.6 Monitoring. The monitoring of fire alarm systems required by the applicable building code shall be maintained in accordance with NFPA 72.

21. Delete Sections 907.7 through 907.7.2.

22. Change Section 907.8.2 to read:

907.8.2 Testing. Testing shall be performed in accordance with the schedules in NFPA 72 or more frequently where required by the fire code official. Where automatic testing is performed at least weekly by a remotely monitored fire

alarm control unit specifically listed for the application, the manual testing frequency shall be permitted to be extended to annual. In Group R-1 occupancies, battery-powered single station smoke detectors shall be tested and inspected at one-month intervals.

Exception: Devices or equipment that are inaccessible for safety considerations shall be tested during scheduled shutdowns where approved by the fire code official, but not less than every 18 months.

23. Change Section 907.8.4 to read:

907.8.4 Maintenance, inspection and testing. The building owner shall be responsible for maintaining the fire and life safety systems in an operable condition at all times. Service personnel shall meet the qualification requirements of NFPA 72 for maintaining, inspecting, and testing such systems. A written record shall be maintained and shall be made available to the fire code official. In addition to all applicable information contained in Figure 7.8.2 of NFPA 72, the written record of inspections, testing, and maintenance shall contain the following minimum information:

1. Date, name, and address of property.

2. Name of person performing inspection, maintenance and tests, or combination thereof, and affiliation, business address, and telephone number.

3. Name, address, and representative of approving agency or agencies.

4. Test frequency.

5. Designation of the standard or procedures used for the inspection or test (for example, "Test performed in accordance with NFPA 72 Section .").

6. List of each device tested and the result. The list should include the physical location and device description of each initiating and notification device tested. (for example, "Heat detector in main kitchen; horn-strobe in Room 115.")

7. Other tests as required by either the equipment manufacturer's published instructions or the authority having jurisdiction.

8. Signature of tester and approved authority representative.

9. Disposition of problems identified during test or devices not tested (examples, "Owner notified," "Problem corrected or successfully retested, or both," "Device abandoned in place.").

24. Delete Section 907.9.

G. The following changes shall be made to Section 908, Emergency Alarm Systems:

1. Change Sections 908.1 and 908.2 to read:

908.1 Group H occupancies. Emergency alarms for the detection and notification of an emergency condition in Group H occupancies shall be maintained as provided in accordance with the applicable building code and manufacturer's specifications.

908.2 Group H-5 occupancy. Emergency alarms for notification of an emergency condition in a hazardous production material (HPM) facility shall be maintained as provided in accordance with the applicable building code. Continuous gas detection systems shall be maintained for HPM gases as provided in accordance with the applicable building code and manufacturer's specifications.

2. Change Section 908.3 to read:

908.3 Fire alarm system interface. Where an emergency alarm system is interfaced with a building's fire alarm system, the signal produced at the fire alarm control unit is permitted to be a supervisory signal.

H. The following changes shall be made to Section 909, Smoke Control Systems:

1. Change Section 909.1 to read:

909.1 Scope and purpose. This section applies to the inspection, testing, and maintenance of mechanical or passive smoke control systems. The purpose of these systems to provide a tenable environment for the evacuation or relocation of occupants. These provisions are not intended for the preservation of contents or the timely restoration of operations or for assistance in fire suppression or overhaul activities. Smoke control systems regulated by this section serve a different purpose than the smoke-venting and heat-venting provisions found in Section 910.

2. Delete Sections 909.2 through 909.4.5.

3. Change Section 909.4.6 to read:

909.4.6 Duration of operation. All portions of active or engineered smoke control systems shall be capable of continued operation after detection of the fire event for a period of not less than that required by the applicable building code.

4. Delete Section 909.4.7.

5. Change Section 909.5 to read:

909.5 Smoke barriers. Smoke barriers required for passive smoke control and smoke control systems using the pressurization method shall be maintained in accordance with Chapter 7 of this code.

6. Delete Sections 909.5.1 and 909.5.2.

7. Change Section 909.5.3 to read:

909.5.3 Opening protection. Protection of openings in smoke barriers shall be maintained in accordance with Chapter 7.

8. Delete Section 909.5.3.1.

9. Change Section 909.5.3.2 to read:

909.5.3.2 Ducts and air transfer openings. Protection of ducts and air transfer openings by smoke dampers shall be maintained in accordance with Chapter 7.

10. Delete Sections 909.6 through 909.10.5.

11. Change Sections 909.11 through 909.11.2 to read:

909.11 Standby power. Standby power provided for smoke control systems shall be maintained in accordance with Section 1203.

909.11.1 Equipment room. Fire barriers associated with equipment rooms servicing smoke control systems shall be maintained in accordance with Chapter 7.

909.11.2 Power sources and power surges. Conditioners, suppressors, or other approved uninterruptable power sources provided for elements of smoke control systems shall be maintained in accordance with the applicable building code.

12. Delete Sections 909.12 through 909.13.3.

13. Change Section 909.15 to read:

909.15 Control diagrams. Identical control diagrams showing all devices in the system and identifying their location and function shall be maintained current and kept on file with the fire code official, with the fire department, and in the fire command center in a format and manner approved by the fire chief.

14. Change Section 909.16. Delete Section 909.16.1.

909.16 Firefighter's smoke control panel. A firefighter's smoke control panel for fire department emergency response purposes only, including manual control or override of automatic control for mechanical smoke control systems, shall be maintained in accordance with the applicable building code.

15. Change Section 909.16.2 to read:

909.16.2 Smoke control panel. The firefighter's control panel shall maintain control capability over the complete smoke control system equipment within the building in accordance with the applicable building code.

16. Change Section 909.16.3 to read:

909.16.3 Control action and priorities. All firefighter's control panel actions and priorities required by the applicable building code shall be maintained as approved.

17. Change Section 909.17 to read:

909.17 System response time. Smoke-control system activation, including all associated components, shall be initiated in accordance with its design. The total response time shall not be less than the requirements specified in the design.

18. Delete Sections 909.18 through 909.18.8.3.

19. Change Sections 909.18.8.3.1 and 909.18.9 to read:

909.18.8.3.1 Report filing. A copy of the final report required by the applicable building code shall be filed with the fire code official and an identical copy shall be maintained in an approved location at the building.

909.18.9 Identification and documentation. Copies of charts, drawings, and other documents identifying and locating each component of the smoke control system and describing their proper function and maintenance requirements shall be maintained on file at the building. Devices shall have an approved identifying tag or mark on them consistent with such copies and shall be dated indicating the last time they were successfully tested and by whom.

20. Delete Sections 909.19 through 909.20.6.3.

21. Delete Sections 909.21.1 through 909.21.2.

22. Change Sections 909.21 and 909.21.3 to read:

909.21 Elevator hoistway pressurization alternative. Where elevator hoistway pressurization is provided in lieu of required enclosed elevator lobbies, the pressurization system shall be maintained in accordance with Sections 909.21.1 through 909.21.11.

909.21.3 Ducts for system. Any duct system protected with a fire-resistance rating shall be maintained in accordance with Chapter 7.

23. Delete Sections 909.21.4.2 through 909.21.4.4.

24. Change Section 909.21.5 to read:

909.21.5 Standby power. Standby power systems for pressurization systems shall be maintained in accordance with Section 1203.

25. Delete Section 909.21.7 and change Section 909.21.6 to read:

909.21.6 Activation of pressurization system. Where required or provided in accordance with the applicable building code, activation of the elevator pressurization system by the building fire alarm system or the elevator lobby smoke detectors shall be maintained.

26. Delete Section 909.21.10.

27. Delete Section 909.21.11

28. Change Sections 909.22.1 and 909.22.6 to read:

909.22.1 Schedule. A routine maintenance and operational testing program shall be initiated immediately after the smoke control system has passed the acceptance tests. A written schedule for routine maintenance and operational testing shall be established and approved by the fire code official.

909.22.6 Components bypassing weekly test. Where components of the smoke control system are bypassed by the preprogrammed weekly test in accordance with the applicable building code, such components shall be tested semiannually. The system shall be tested under standby power conditions.

I. The following changes shall be made to Section 910, Smoke and Heat Removal:

1. Delete Sections 910.2 through 910.3.5.

2. Change Section 910.4 to read:

910.4 Mechanical smoke removal systems. Mechanical smoke removal systems provided shall be maintained in accordance with this section and the applicable building code.

3. Delete Sections 910.4.1 through 910.4.3, 910.4.5, and 910.4.6 and change Sections 910.4.4 and 910.4.7 to read:

910.4.4 Activation. Where the applicable building code requires that a mechanical smoke removal system shall be activated by manual controls only, only manual controls shall be permitted.

910.4.7 Controls. Where the applicable building code requires that manual controls be provided for the smoke removal system that have the capability to override the automatic shutdown of fans that are part of the smoke removal system, the override capability shall be maintained.

J. The following changes shall be made to Section 911, Explosion Control:

1. Change Section 911.1 to read:

911.1 General. Explosion control systems and components shall be maintained and operated in accordance with the applicable provisions of NFPA 69 or NFPA 495. Deflagration venting shall not be used as a means to protect buildings from detonation hazards.

2. Delete Table 911.1 and Sections 911.2 through 911.5.

K. The following changes shall be made to Section 912, Fire Department Connections:

1. Delete Section 912.1.

2. Change Sections 912.2 and 912.2.1 to read:

912.2 Location. With respect to hydrants, driveways, buildings, and landscaping, fire department connections shall remain located in accordance with the applicable building code so that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus.

912.2.1 Visible location. Fire department connections shall remain located on the street side of buildings or facing approved fire apparatus access roads, fully visible and recognizable from the street, fire apparatus access road or nearest point of fire department vehicle access or as otherwise approved by the fire code official and in accordance with the applicable building code.

3. Change Section 912.6 to read:

912.6 Backflow protection. The potable water supply to automatic sprinkler and standpipe systems protected against backflow as required by the applicable building code shall be maintained in accordance with NFPA 25.

L. The following changes shall be made to Section 913, Fire Pumps:

1. Change Sections 913.1 through 913.2.1 to read:

913.1 General. Fire pumps shall be maintained in accordance with this section, the applicable NFPA 20 standard, NFPA 25, and the applicable building code.

913.2 Protection against interruption of service. The fire pump, driver, and controller shall be maintained in accordance with the applicable building code against possible interruption of service through damage caused by explosion, fire, flood, earthquake, rodents, insects, windstorm, freezing, vandalism, and other adverse conditions.

913.2.1 Protection of fire pump rooms. Rooms where fire pumps are separated from all other areas of the building by a fire-rated assembly in accordance with the applicable building code shall be maintained in accordance with Chapter 7.

2. Delete Section 913.2.2.

3. Change Sections 913.3 and 913.4 to read:

913.3 Temperature of pump room. Suitable means shall be provided for maintaining the temperature of a pump room or pump house above 40°F (5°C).

913.4 Valve supervision. Where provided, the fire pump suction, discharge and bypass valves, and isolation valves on the backflow prevention device or assembly shall be maintained as supervised in accordance with the applicable building code. Where a fire alarm system is provided, a supervisory signal shall also be transmitted to the control unit.

Exception: Valves locked in the normal position and inspected as permitted in the applicable building code in buildings not equipped with a fire alarm system.

4. Delete Section 913.5.1.

M. Delete Section 914.

N. The following changes shall be made to Section 915, Carbon Monoxide Detection:

1. Change Section 915.1 to read:

915.1 General. Where provided, carbon monoxide detection shall be installed in accordance with the applicable building code.

2. Delete Sections 915.1.1 through 915.5.3.

O. The following changes shall be made to Section 916, Gas Detection Systems:

1. Change Section 916.1 to read:

916.1 Gas detection systems. Gas detection systems shall be maintained in accordance with the applicable building code and this section.

2. Delete Sections 916.2 and 916.2.1.

3. Change Sections 916.3 through 916.6 to read:

916.3 Equipment. Gas detection system equipment shall be operated and maintained in accordance with the applicable building code and manufacturer's instructions.

916.4 Power connections. Gas detection systems shall remain permanently connected to the building electrical power supply or, where approved by the applicable building code, cord connected to an unswitched receptacle using an approved restraining means that secures the plug to the receptacle.

916.5 Emergency and standby power. Standby or emergency power shall be maintained in accordance with Section 1203. Where required by the applicable building code, the gas detection system shall initiate a trouble signal at an approved location if the power supply is interrupted.

916.6 Sensor locations. Sensors shall remain in locations approved in accordance with the applicable building code where leaking gases are expected to accumulate.

4. Delete Section 916.7 and change Sections 916.9 through 916.10 to read:

916.9 Signage. Signs shall be provided and maintained adjacent to gas detection system alarm signaling devices that advise occupants of the nature of the signals and actions to take in response to the signal.

916.10 Fire alarm system connections. Gas sensors and gas detection systems shall not be connected to fire alarm systems unless approved in accordance with the applicable building code and connected in accordance with the fire alarm equipment manufacturer's instructions.

P. The following change shall be made to Section 917, Mass notification systems:

917.1 Mass notification. Where provided, mass notification systems shall be maintained in accordance with NFPA 72.

13VAC5-52-220. IFC Chapter 10 Means of Egress.

Replace Chapter 10 with the following:

1001.1 General. Means of egress systems for buildings or portions thereof shall be maintained in accordance with the applicable building code and this chapter.

1001.2 Minimum requirements. It shall be unlawful to alter a building or structure in a manner that will reduce the number of exits or the capacity of the means of egress to less than required by this code.

1001.3 Overcrowding. Overcrowding, admittance of any person beyond the approved occupant load established by the USBC or other building code under which the building was constructed, or obstructing aisles, passageways, or any part of the means of egress shall not be allowed. The fire code official, upon finding any condition that constitutes a life safety hazard, shall be authorized to cause the event to be stopped until such condition or obstruction is corrected.

1001.3.1 Temporary occupant load determination. Where the fire code official determines that overcrowding may exist, the fire code official shall be permitted to utilize the egress component sizing requirements and occupant load allowances of the VCC to determine a temporary occupant load. Where such determination is made, the fire code official shall be permitted to require an approved temporary sign posting of the maximum allowable occupant load and such sign shall be maintained until the building official approves the allowable occupant load, at which time a permanent sign shall be posted, where applicable, or the temporary sign may be removed.

1001.4 Unauthorized use of emergency supplemental hardware. No person shall utilize any approved emergency supplemental hardware to prevent the ingress or egress from any occupied space.

Exceptions:

1. Utilized by authorized persons or other persons occupying such space in the event of any actual or perceived hostile threat or active shooter event.

2. Utilized in conjunction with any approved lockdown drill requiring the utilization of the approved emergency supplemental hardware.

3. Utilization for the testing, use, and training by emergency response personnel.

Where such device is utilized in accordance with Exceptions 1, 2, and 3, the hardware device shall be removed immediately following the conditions of such exceptions.

SECTION 1002 DEFINITIONS

1002.1 Definitions.

The following terms are defined in Chapter 2:

ACCESSIBLE MEANS OF EGRESS.

AISLE.

AISLE ACCESSWAY.

ALTERNATING TREAD DEVICE.

AREA OF REFUGE.

BLEACHERS.

BREAKOUT.
COMMON PATH OF EGRESS TRAVEL.
CORRIDOR.
DOOR, BALANCED.
EGRESS COURT.
EMERGENCY ESCAPE AND RESCUE OPENING.
EXIT.
EXIT ACCESS.
EXIT ACCESS DOORWAY.
EXIT ACCESS RAMP.
EXIT ACCESS STAIRWAY.
EXIT DISCHARGE.
EXIT DISCHARGE, LEVEL OF.
EXIT PASSAGEWAY.
EXTERIOR EXIT RAMP.
EXTERIOR EXIT STAIRWAY.
FIRE EXIT HARDWARE.
FIXED SEATING.
FLIGHT.
FLOOR AREA, GROSS.
FLOOR AREA, NET.
FOLDING AND TELESCOPIC SEATING.
GRANDSTAND.
GUARD.
HANDRAIL.
HORIZONTAL EXIT.
INTERIOR EXIT RAMP.
INTERIOR EXIT STAIRWAY.
LOW ENERGY POWER-OPERATED DOOR.
MEANS OF EGRESS.
MERCHANDISE PAD.
NOSING.
OCCUPANT LOAD.
OPEN-AIR ASSEMBLY SEATING.
OPEN-ENDED CORRIDOR.
PANIC HARDWARE.
PHOTOLUMINESCENT.
POWER-ASSISTED DOOR.
POWER-OPERATED DOOR.
PUBLIC WAY.
RAMP.
SCISSOR STAIRWAY.
SELF-LUMINOUS.
SMOKE-PROTECTED ASSEMBLY SEATING.
STAIR.
STAIRWAY.
STAIRWAY, INTERIOR EXIT.
STAIRWAY, SPIRAL.
WINDER.

SECTION 1003 GENERAL MEANS OF EGRESS

1003.1 Applicability. The general requirements specified in Sections 1003 through 1015 shall apply to the maintenance of the building.

1003.2 Ceiling height. The means of egress ceiling height shall be maintained in accordance with the applicable building code.

1003.3 Protruding objects. Protruding objects on circulation paths shall comply with the requirements of Sections 1003.3.1 through 1003.3.4.

1003.3.1 Headroom. Minimum headroom shall be maintained in accordance with the applicable building code.

1003.3.2 Post-mounted objects. Clearances for a freestanding object mounted on a post or pylon shall be maintained in accordance with the applicable building code.

1003.3.3 Horizontal projections. Limitations of projection of objects into a means of egress in accordance with the applicable building code shall be maintained and not reduce the means of egress.

1003.3.4 Clear width. Protruding objects shall not reduce the minimum clear width of accessible routes.

1003.4 Floor surface. Walking surfaces shall be maintained in accordance with the applicable building code. Slip and trip hazards in the means of egress shall be abated.

1003.5 Elevation change. Where changes in elevation in the means of egress exist, they shall be maintained in accordance with the applicable code.

1003.6 Means of egress continuity. Means of egress continuity shall be maintained in accordance with the applicable building code. Obstructions, except those permitted by the applicable building code, shall not reduce the minimum width or required capacity of means of egress components.

1003.7 Elevators, escalators and moving walks. Elevators, escalators, and moving walks that are an approved component of a required means of egress shall be maintained in accordance with the applicable building code.

SECTION 1004 OCCUPANT LOAD

1004.1 Design occupant load. The design occupant load shall be maintained in accordance with the applicable building code.

1004.4 Multiple occupancies. Where a building contains two or more occupancies, the means of egress requirements shall be maintained in accordance with the applicable building code.

1004.7 Outdoor areas. The means of egress for yards, patios, occupied roofs, courts, and similar accessible and usable outdoor areas shall be maintained in accordance with the applicable building code.

1004.9 Posting of occupant load. Every room or space that is an assembly occupancy and where the occupant load of that room or space is 50 or more shall have the occupant load of the room or space posted in a conspicuous place near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or the owner's authorized agent.

SECTION 1005 MEANS OF EGRESS SIZING

1005.1 General. All portions of the means of egress system shall be sized in accordance with the applicable building code.

1005.2 Minimum width based on component. The minimum width of any means of egress components shall be maintained in accordance with the applicable building code.

1005.3 Required capacity based on occupant load. The required capacity of the means of egress for any room, area, space, or story shall be maintained in accordance with the applicable building code.

1005.3.1 Stairways. The capacity in inches of means of egress stairways shall be maintained in accordance with the applicable building code.

1005.4 Continuity. The minimum width or required capacity of the means of egress required from any story of a building shall be maintained in accordance with the applicable building code.

1005.6 Egress convergence. Where the means of egress from stories above and below converge at an intermediate level, the capacity of the means of egress from the point of convergence shall be maintained in accordance with the applicable code.

1005.7 Encroachment. Encroachments into the required means of egress width shall be in accordance with the provisions of the applicable building code.

1005.7.1 Doors. Doors shall be maintained such that when fully opened, the open door shall not reduce the required width by more than what is permitted by the applicable building code. Door swing in any position shall not reduce the required width by more than one-half unless allowed by the applicable building code.

1005.7.2 Other projections. Other projections shall be maintained and shall be in accordance with the applicable building code.

SECTION 1006 NUMBERS OF EXITS AND EXIT ACCESS DOORWAYS

1006.1 General. The number of exits or exit access doorways required within the means of egress system shall be maintained in accordance with the applicable building code.

1006.2 Egress from spaces. Egress from spaces shall be maintained in accordance with the applicable building code.

1006.2.1 Egress based on occupant load and common path of egress travel distance. The minimum number of exits or exit access doorways required by the applicable building code from any space shall be maintained.

1006.2.1.1 Three or more exits or exit access doorways. Where three or more exits or exit access doorways are required by the applicable building code, the number required shall be maintained.

1006.2.2 Egress based on use. The minimum number of exits or access to exits required by the applicable building code shall be maintained. Approved egress for boiler, incinerator, and furnace rooms, refrigeration machinery rooms, refrigerated rooms or spaces, Group I-4 day care, vehicular ramps, and Group R-3 or R-4 occupancies or spaces shall be maintained in accordance with the applicable building code.

1006.3 Egress from stories or occupied roofs. The means of egress system serving any story or occupied roof shall be maintained in accordance with the applicable building code.

1006.3.1 Adjacent Story. A path of travel, approved in accordance with the applicable building code, that passes through an adjacent story shall be maintained.

1006.3.2 Egress based on occupant load. Each story and roof of a building shall maintain the minimum number of separate and distinct exits required by the applicable building code.

1006.3.3 Single exits. A single exit or access to a single exit from any story or occupied roof approved in accordance with the applicable building code shall be maintained.

SECTION 1007 EXIT AND EXIT ACCESS DOORWAY CONFIGURATION

1007.1 General. Exits, exit access doorways, and exit access stairways and ramps serving spaces, including individual building stories, shall be maintained in accordance with the applicable code.

SECTION 1008 MEANS OF EGRESS ILLUMINATION

1008.1 Means of egress illumination. Illumination provided in the means of egress shall be maintained in accordance with the applicable code.

1008.2 Illumination required. Illumination provided for the means of egress serving a room or space shall be

maintained in accordance with the applicable building code.

1008.2.1 Illumination level under normal power. The means of egress illumination level required by the applicable building code shall be maintained.

1008.2.3 Exit discharge. Illumination required by the applicable building code along the path of travel for the exit discharge from each exit to the public way shall be maintained.

1008.3 Emergency power for illumination. The power supply for means of egress illumination shall be maintained in accordance with the applicable building code.

1008.3.5 Illumination level under emergency power. Emergency lighting facilities required and approved by the applicable building code shall be maintained.

SECTION 1009 ACCESSIBLE MEANS OF EGRESS

1009.1 Accessible means of egress required. Accessible means of egress shall be maintained in accordance with the applicable building code.

1009.2 Continuity and components. Continuity and components provided for accessible means of egress shall be maintained in accordance with the applicable building code.

1009.3 Stairways. Stairways part of an accessible means of egress shall be maintained in accordance with the applicable building code.

1009.4 Elevators. Elevators considered part of the means of egress shall be maintained in accordance with the applicable building code.

1009.5 Platform lifts. Platform lifts serving as a part of an accessible means of egress shall be maintained in accordance with the applicable building code.

1009.6 Areas of refuge. Areas of refuge shall be maintained in accordance with the applicable building code.

1009.7 Exterior areas for assisted rescue. Exterior areas for assisted rescue shall be maintained in accordance with the applicable building code.

1009.8 Two-way communication. Where provided, two-way communication systems shall be maintained in accordance with the applicable building code.

1009.8.2 Directions. Directions for the use of the two-way communication system, instructions for summoning assistance via the two-way communication system, and written identification of the location shall be posted adjacent to the two-way communication system. Signage shall comply with the ICC A117.1 requirements for visual characters.

1009.9 Signage. Signage indicating special accessibility provisions shall be provided as shown:

1. Each door providing access to an area of refuge from an adjacent floor area shall be identified by a sign stating: AREA OF REFUGE.

2. Each door providing access to an exterior area for assisted rescue shall be identified by a sign stating: EXTERIOR AREA FOR ASSISTED RESCUE.

Signage shall comply with the ICC A117.1 requirements for visual characters and include the International Symbol of Accessibility. Where exit sign illumination is required by Section 1013.3, the signs shall be illuminated. Additionally, visual characters, raised character, and Braille signage complying with ICC A117.1 shall be located at each door to an area of refuge and exterior area for assisted rescue in accordance with Section 1013.4.

1009.10 Directional signage. Directional signage indicating the location of all other means of egress and which of those are accessible means of egress shall be provided at the following:

1. At exits serving a required accessible space but not providing an approved accessible means of egress.

2. At elevator landings.

3. Within areas of refuge.

1009.11 Instructions. In areas of refuge and exterior areas for assisted rescue, instructions on the use of the area under emergency conditions shall be posted. Signage shall comply with the ICC A117.1 requirements for visual characters. The instructions shall include all of the following:

1. Persons able to use the exit stairway do so as soon as possible, unless they are assisting others.

2. Information on planned availability of assistance in the use of stairs or supervised operation of elevators and how to summon such assistance.

3. Directions for use of the two-way communication system where provided.

SECTION 1010 DOORS, GATES AND TURNSTILES

1010.1 Doors. Doors serving a means of egress system shall be maintained in accordance with the applicable building code. Means of egress doors shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on means of egress doors. Means of egress doors shall not be concealed by curtains, drapes, decorations, or similar materials.

1010.1.4.5 Security grilles. In Groups B, F, M, and S, horizontal sliding or vertical security grilles are permitted at the main exit and shall be openable from the inside without the use of a key or special knowledge or effort during periods that the space is occupied. The grilles shall remain secured in the full-open position during the period of occupancy by the general public. Where two or more

means of egress are required, not more than one-half of the exits or exit access doorways shall be equipped with horizontal sliding or vertical security grilles.

1010.1.5 Floor elevation. Floors or landings at doorways shall be maintained in accordance with the applicable building code.

1010.1.8 Door arrangement. Minimum space between doors in a series of doors shall be maintained as approved in accordance with the applicable code.

1010.1.9 Door operations. Locks and latches approved in accordance with the applicable building code shall be maintained. Except as specifically permitted by the applicable building code, egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

1010.1.9.1 Hardware. Door handles, pulls, latches, locks, and other operating devices on doors required by the applicable building code to be accessible shall be maintained. Additions or alterations of hardware shall be approved by the building official in accordance with Section 102.6.

1010.1.9.3 Monitored or recorded egress. Electrical systems that monitor or record egress activity and impact the door operations shall be approved in accordance with the applicable building code and shall be maintained in accordance with this section.

1010.1.9.4 Locks and latches. Where required, a readily visible durable sign is posted on the egress side on or adjacent to the door stating: "THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED." The sign shall be in letters one inch (25 mm) high on a contrasting background. Emergency supplemental hardware provided in accordance with the applicable building code shall be provided with a readily visible durable sign posted on the egress side on or adjacent to the door stating: "THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY." The sign shall be in letters one inch (25 mm) high on a contrasting background.

1010.1.9.5 Bolt locks. Manually operated flush bolts or surface bolts approved in accordance with the applicable building code shall be maintained.

1010.1.9.6 Unlatching. Where the applicable building code requires that the unlatching of any door or leaf require no more than one operation, one operation shall be maintained.

1010.1.9.6.1 Closet doors. Where closet doors that latch in the closed position are required by the applicable building code to be openable from the inside, they shall be maintained.

1010.1.9.7 Controlled egress doors in Groups I-1 and I-2. Electric locking systems, including electromechanical locking systems and electromagnetic locking systems, shall be operated and maintained in accordance with the applicable building code.

1010.1.9.8 Delayed egress. Delayed egress locking systems shall be operated and maintained in accordance with the applicable building code.

1010.1.9.9 Sensor release of electrically locked egress doors. The electric locks on sensor-released doors located in a means of egress shall be operated and maintained in accordance with the applicable building code.

1010.1.9.10 Door hardware release of electrically locked egress doors. Door hardware release of electric locking systems installed on doors in the means of egress shall be operated and maintained in accordance with the applicable code.

1010.1.9.11 Locking arrangements in buildings within correctional facilities. In buildings within correctional and detention facilities, doors in means of egress serving rooms or spaces occupied by persons whose movements are controlled for security reasons shall be operated and maintained in accordance with the applicable building code.

1010.1.9.12 Stairway doors. Interior stairway means of egress doors required by the applicable building code to be openable from both sides shall be maintained.

1010.1.10 Panic and fire exit hardware. Where the applicable building code requires panic or fire exit hardware on doors, it shall be maintained.

1010.2 Gates. Gates serving the means of egress system shall be operated and maintained in accordance with the applicable building code.

1010.3 Turnstiles. Turnstiles or similar devices shall be operated and maintained in accordance with the applicable building code.

1010.3.2 Security access turnstiles. Security access turnstiles that inhibit travel in the direction of egress shall only be maintained and only operated in accordance with the applicable building code.

SECTION 1011 STAIRWAYS

1011.1 General. Stairways serving any portion of a building shall be maintained in accordance with the applicable building code.

1011.2 Width and capacity. The capacity of stairways shall be maintained in accordance with the applicable building code.

1011.3 Headroom. Headroom requirements for stairways shall be maintained in accordance with the applicable building code.

1011.4 Walkline. The walkline across winder treads shall be maintained in accordance with the applicable building code.

1011.5 Stair treads and risers. Stair treads and risers shall be maintained in accordance with the applicable building code.

1011.5.1 Dimensional uniformity. Stair tread and riser dimensions shall comply with the applicable building code and shall be maintained.

1011.6 Stairway landings. The floor or landing at the top and bottom of each stairway shall be maintained in accordance with the applicable building code.

1011.7 Stairway arrangement. Stairways shall be maintained in accordance with the applicable building code. Construction or alterations shall be approved by the building official in accordance with Section 102.6.

1011.7.3 Storage and enclosures under interior stairways. The usable spaces under enclosed and unenclosed stairways shall only be used for combustible storage where approved in accordance with the applicable building code.

1011.7.4 Storage and enclosures and storage under exterior stairways. The usable spaces under exterior stairways shall only be used for combustible storage where approved in accordance with the applicable building code.

1011.8 Vertical rise. Vertical rise of a flight of stairs shall be maintained in accordance with the applicable building code.

1011.9 Curved stairways. Curved stairways with winder treads shall be maintained in accordance with the applicable building code.

1011.10 Spiral stairways. Spiral stairways used as a component in the means of egress shall be maintained in accordance with the applicable building code.

1011.11 Handrails. Handrails for stairways shall be maintained in accordance with the applicable building code.

1011.12 Stairway to roof. Stairways to a roof shall be maintained in accordance with the applicable building code.

1011.12.1 Stairway to elevator equipment. Access to roofs and penthouses for maintenance of elevator equipment shall be maintained as approved in accordance with the applicable building code.

1011.12.2 Roof access. Where a stairway provides access to a roof through a penthouse, such access shall be maintained as approved and in accordance with the applicable building code.

1011.13 Guards. Guards shall be maintained in accordance with the applicable building code.

1011.14 Alternating tread devices. Alternating tread devices shall be maintained in accordance with the applicable building code.

1011.15 Ship's ladders. Ship's ladders shall be maintained in accordance with the applicable building code.

1011.16 Ladders. Permanent ladders shall be maintained as approved and in accordance with the applicable building code.

SECTION 1012 RAMPS

1012.1 Scope. The provisions of this section shall apply to the maintenance of ramps used as a component of a means of egress.

1012.2 Slope. Ramp slopes shall be maintained in accordance with the applicable building code.

1012.3 Cross slope. The cross slope for ramps shall be maintained in accordance with the applicable building code.

1012.4 Vertical rise. The rise for any ramp run shall be maintained in accordance with the applicable building code.

1012.5 Minimum dimensions. The minimum dimensions of means of egress ramps shall be maintained as approved and in accordance with the applicable building code.

1012.6 Landings. Landings serving ramps shall be maintained in accordance with the applicable building code.

1012.7 Ramp construction. Ramps shall be maintained as approved in accordance with the applicable building code. Construction or alterations shall be approved by the building official in accordance with Section 102.6.

1012.8 Handrails. Handrails serving ramps shall be maintained in accordance with the applicable building code.

1012.9 Guards. Guards shall be maintained in accordance with the applicable building code.

1012.10 Edge protection. Edge protection shall be maintained in accordance with the applicable building code.

SECTION 1013 EXIT SIGNS

1013.1 Where required. Exits and exit access doors shall be maintained in accordance with the applicable building code.

1013.2 Floor-level exit signs in Group R-1. Floor-level exit signs in Group R-1 buildings shall be maintained in accordance with the applicable building code.

1013.3 Illumination. Exit sign illumination shall be maintained in accordance with the applicable building code.

1013.4 Raised character and Braille exit signs. Raised character and Braille exit signs shall be maintained in accordance with the applicable building code.

1013.5 Internally illuminated exit signs. Electrically powered, self-luminous, and photoluminescent exit signs shall be maintained in accordance with the applicable building code.

1013.6 Externally illuminated exit signs. Externally illuminated exit signs shall be maintained in accordance with the applicable building code.

SECTION 1014 HANDRAILS

1014.1 Where required. Handrails serving stairways, ramps, stepped aisles, and ramped aisles shall be maintained in accordance with the applicable building code.

1014.2 Height. Handrail height shall be maintained in accordance with the applicable building code.

1014.3 Handrail graspability. Handrail graspability shall be maintained in accordance with the applicable building code.

1014.4 Continuity. Handrail continuity shall be maintained in accordance with the applicable building code.

1014.7 Clearance. Clear space between a handrail and a wall or other surface shall be maintained in accordance with the applicable building code.

1014.8 Projections. Projections into the required width of aisles, stairways, and ramps at each side shall be maintained as approved and in accordance with the applicable building code.

1014.9 Intermediate handrails. Where provided, intermediate handrails shall be maintained in accordance with the applicable building code.

SECTION 1015 GUARDS

1015.1 General. Guards shall be maintained in accordance with the applicable building code.

1015.3 Height. Guard height shall be maintained in accordance with the applicable building code.

1015.4 Opening limitations. Openings in guards shall be maintained in accordance with the applicable building code.

1015.5 Screen porches. Guards provided for screen porches shall be maintained in accordance with the applicable building code.

1015.6 Mechanical equipment, systems, and devices. Guards provided for mechanical equipment shall be maintained in accordance with the applicable building code.

1015.7 Roof access. Guards provided for roof access shall be maintained in accordance with the applicable building code.

1015.8 Window openings. Windows shall be maintained in accordance with the applicable building code.

1015.8.1 Window opening control devices. Window opening control devices shall be maintained as approved in accordance with the applicable building code.

SECTION 1016 EXIT ACCESS

1016.1 General. The exit access shall be maintained in accordance with the applicable building code.

1016.2 Egress through intervening spaces. Egress through intervening spaces shall be maintained in accordance with the applicable building code.

1016.2.1 Multiple tenants. Where more than one tenant occupies any one floor of a building or structure, each tenant space, dwelling unit, and sleeping unit means of egress shall maintain access to the required exits without passing through adjacent tenant spaces, dwelling units, and sleeping units unless otherwise permitted by the applicable building code.

SECTION 1017 EXIT ACCESS TRAVEL DISTANCE

1017.1 General. Travel distance within the exit access portion of the means of egress system shall be maintained in accordance with the applicable building code.

SECTION 1018 AISLES

1018.1 General. Aisles and aisle accessways serving as a portion of the exit access in the means of egress system shall be maintained in accordance with the applicable building code.

1018.2 Aisles in assembly spaces. Aisles and aisle accessways serving a room or space used for assembly purposes shall be maintained in accordance with the applicable building code.

1018.3 Aisles in Groups B and M. In Groups B and M occupancies, the aisle width shall be maintained in accordance with the applicable building code.

1018.4 Aisle accessways in Group M. Aisle accessways in Group M shall be maintained in accordance with the applicable building code.

1018.5 Aisles in other than assembly spaces and Groups B and M. Aisles in other than assembly spaces and Groups B and M shall be maintained in accordance with the applicable building code.

SECTION 1019 EXIT ACCESS STAIRWAYS AND RAMPS

1019.1 General. Exit access stairways and ramps serving as an exit access component in a means of egress system shall be maintained in accordance with the applicable building code.

SECTION 1020 CORRIDORS

1020.1 Maintenance. Corridors shall be maintained as approved in accordance with the applicable building code. Fire-resistance rated construction shall be maintained in accordance with Chapter 7.

1020.1.1 Hoistway openings. Elevator hoistway openings shall be maintained as approved in accordance with the applicable building code.

1020.2 Width and capacity. The width and capacity of corridors shall be maintained in accordance with the applicable building code.

1020.3 Obstruction. The minimum width or required capacity of corridors shall be unobstructed.

Exception: Encroachments complying with Section 1005.7.

1020.4 Dead ends. Where more than one exit or exit access doorway is required by the applicable building code, the exit access, including any dead end conditions, shall be maintained as approved in accordance with the applicable building code.

1020.5.1 Corridor ceiling. When the space between the corridor ceiling and the floor or roof structure above is used as a return air plenum, the space and any contents shall be maintained as approved in accordance with the applicable building code.

1020.6 Corridor continuity. The continuity of fire-resistance-rated corridors shall be maintained in accordance with the applicable building code.

SECTION 1021 EGRESS BALCONIES

1021.1 General. Balconies used for egress purposes shall be maintained in accordance with the applicable building code.

1021.2 Wall separation. Wall separation for egress balconies shall be maintained in accordance with the applicable building code.

1021.3 Openness. The required openness of egress balconies shall be maintained as approved in accordance with the applicable building code.

1021.4 Location. The fire separation distance for exterior egress balconies shall be maintained in accordance with the applicable building code.

SECTION 1022 EXITS

1022.1 General. An exit shall not be used for any purpose that interferes with its function as a means of egress. Once a given level of exit protection is achieved, such level of protection shall not be reduced until arrival at the exit discharge. Exits shall be continuous from the point of entry into the exit to the exit discharge. Exits shall be maintained in accordance with the applicable building code.

1022.2 Exterior exit doors. Exterior exit doors shall be maintained in accordance with the applicable building code.

SECTION 1023 INTERIOR EXIT STAIRWAYS AND RAMPS

1023.1 General. Interior exit stairways and ramps serving as an exit component in a means of egress system shall be maintained in accordance with the applicable building code.

1023.2 Maintenance. Enclosures for interior exit stairways and ramps shall be maintained as approved in accordance with the applicable building code. Fire-resistance-rated construction shall be maintained in accordance with Chapter 7.

1023.3 Termination. Interior exit stairways and ramps shall terminate as approved in accordance with the applicable building code.

1023.3.1 Connections. Where interior exit stairways and ramps connect to an exit discharge or a public way by an exit passageway, the interior exit stairway and ramp shall be maintained as approved in accordance with the applicable building code. Fire-resistance-rated construction shall be maintained in accordance with Chapter 7.

1023.4 Openings. Interior exit stairway and ramp opening protectives shall be maintained in accordance with the applicable building code.

1023.5 Penetrations. Penetrations into or through interior exit stairways shall be maintained as approved in accordance with the applicable building code. Fire-resistance-rated construction shall be maintained in accordance with Chapter 7.

1023.6 Ventilation. Equipment and ductwork for interior exit stairway and ramp ventilation shall be maintained as approved and remain operational in accordance with the applicable building code.

1023.7 Interior exit stairway and ramp exterior walls. Exterior walls of the interior exit stairway or ramp shall be maintained in accordance with the applicable building code.

1023.8 Discharge identification. Where the applicable building code requires a barrier to prevent persons from unintentionally continuing into levels below the level of exit discharge for an interior exit stairway or ramp, the barrier shall be maintained as approved in accordance with the applicable building code. Directional exit signs shall be maintained in accordance with the applicable building code.

1023.9 Stairway identification signs. A sign shall be provided at each floor landing in an interior exit stairway and ramp connecting more than three stories designating the floor level, the terminus of the top and bottom of the interior exit stairway and ramp, and the identification of the stairway or ramp. The signage shall state the story of and the direction to the exit discharge and the availability of roof access from the interior exit stairway and ramp for the fire department. The sign shall be located five feet (1524 mm) above the floor landing in a position that is readily visible when the doors are in the open and closed positions. In addition to the stairway identification sign, a floor-level sign in visual characters, raised characters and Braille complying with ICC A117.1 shall be located at

each floor-level landing adjacent to the door leading from the interior exit stairway and ramp into the corridor to identify the floor level.

1023.9.1 Signage requirements. Stairway identification signs shall comply with all of the following requirements:

1. The signs shall be a minimum size of 18 inches (457 mm) by 12 inches (305 mm).

2. The letters designating the identification of the interior exit stairway and ramp shall be not less than 1-1/2 inches (38 mm) in height.

3. The number designating the floor level shall be not less than of five inches (127 mm) in height and located in the center of the sign.

4. Other lettering and numbers shall be not less than one inch (25 mm) in height.

5. Characters and their background shall have a nonglare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

1023.10 Elevator lobby identification signs. At landings in interior exit stairways where two or more doors lead to the floor level, any door with direct access to an enclosed elevator lobby shall be identified by signage located on the door or directly adjacent to the door stating "Elevator Lobby." Signage shall be in accordance with Section 1023.9.1, Items 4 and 5.

1023.11 Smokeproof enclosures. Smokeproof enclosures shall be maintained in accordance with the applicable building code.

1023.11.2 Enclosure access. Access to the stairway or ramp within a smokeproof enclosure shall be maintained as approved in accordance with the applicable building code.

1023.12 Standpipes. Standpipe and standpipe hose connections in smokeproof enclosures shall be maintained in accordance with Chapter 9.

SECTION 1024 EXIT PASSAGEWAYS

1024.1 Exit passageways. Exit passageways serving as an exit component in a means of egress system shall be maintained in accordance with the applicable building code.

1024.2 Width. The minimum width or required capacity of exit passageways shall be maintained in accordance with the applicable building code.

1024.3 Maintenance. Exit passageway enclosures shall be maintained as approved in accordance with the applicable building code. Fire-resistance-rated construction shall be maintained in accordance with Chapter 7.

1024.4 Termination. The termination of exit passageways shall be maintained as approved in accordance with the applicable building code.

1024.5 Openings. Exit passageway opening protectives shall be maintained in accordance with the applicable building code.

1024.6 Penetrations. Penetration protection shall be maintained in accordance with the applicable building code.

1024.7 Ventilation. Equipment and ductwork for exit passageway ventilation shall be maintained in accordance with the applicable building code.

SECTION 1025 LUMINOUS EGRESS PATH MARKINGS

1025.1 General. Luminous egress path markings shall be maintained in accordance with the applicable building code.

1025.2 Markings within exit components. Egress path markings provided in interior exit stairways, interior exit ramps, and exit passageways shall be maintained in accordance with the applicable building code.

1025.2.5 Obstacles. Where the applicable building code requires luminous egress path markings of obstacles projecting into the egress path, the markings shall be maintained as approved in accordance with the applicable building code.

1025.2.6 Doors within the exit path. Luminous egress path markings of doors through which occupants must pass in order to complete the exit path shall be maintained as approved in accordance with the applicable building code.

1025.4 Self-luminous and photoluminescent. Self-luminous and photoluminescent egress path markings shall be maintained in accordance with the applicable building code.

1025.5 Illumination. Photoluminescent exit path markings shall be maintained in accordance with the applicable building code.

SECTION 1026 HORIZONTAL EXITS

1026.1 Horizontal exits. Horizontal exits serving as an exit in a means of egress system shall be maintained in accordance with the applicable building code.

1026.2 Separation. The separation between buildings or refuge areas connected by a horizontal exit shall be maintained in accordance with the applicable building code.

1026.3 Opening protectives. Fire doors in horizontal exits shall be maintained in accordance with the applicable building code.

1026.4 Refuge area. Where provided, the refuge area of a horizontal exit shall be maintained in accordance with the applicable building code.

SECTION 1027 EXTERIOR EXIT STAIRWAYS AND RAMPS

1027.1 Exterior exit stairways and ramps. Exterior exit stairways and ramps serving as an element of a required means of egress shall be maintained in accordance with the applicable building code.

1027.2 Use in a means of egress. Exterior exit stairways and ramps approved as an element of a required means of egress in accordance with the applicable building code shall be maintained.

1027.3 Open side. Required open side area for exterior exit stairways and ramps serving as an element of a required means of egress shall be maintained as approved in accordance with the applicable building code.

1027.4 Side yards. The open areas adjoining exterior exit stairways or ramps required by the applicable building code to be yards, courts, or public ways shall be maintained as approved in accordance with the applicable building code.

1027.5 Location. The minimum fire separation distance from the exterior edge of the stairway or ramps, including landings for exterior exit stairways and ramps, shall be maintained as approved in accordance with the applicable building code.

1027.6 Exterior exit stairway and ramp protection. Separation or fire-resistance-rated protection of exterior exit stairways and ramps from the interior of the building shall be maintained as approved in accordance with the applicable building code.

SECTION 1028 EXIT DISCHARGE

1028.1 General. The exit discharge shall be maintained in accordance with the applicable building code.

1028.2 Exit discharge width or capacity. The minimum width or required capacity of the exit discharge shall be maintained in accordance with the applicable building code.

1028.3 Exit discharge components. Exit discharge components shall be maintained in accordance with the applicable building code.

1028.4 Egress courts. Egress courts serving as a portion of the exit discharge in the means of egress system shall be maintained in accordance with the applicable building code.

1028.4.1 Width or capacity. The required capacity of egress courts shall be maintained in accordance with the applicable building code.

1028.4.2 Egress court protection. Separation or fire-resistance-rated construction required by the applicable building code for an egress court serving a building or portion thereof shall be maintained as approved in accordance with the applicable building code.

1028.5 Access to a public way. Where provided, access to a public way shall be maintained in accordance with the applicable building code.

Exception: Where access to a public way cannot be provided, a safe dispersal area shall be provided where all of the following are met:

1. The area shall be of a size to accommodate not less than five square feet (0.46 m2) for each person.

2. The area shall be located on the same lot not less than 50 feet (15,240 mm) away from the building requiring egress.

3. The area shall be permanently maintained and identified as a safe dispersal area.

4. The area shall be provided with a safe and unobstructed path of travel from the building.

SECTION 1029 EGRESS COURTS

1029.1 General. Egress courts serving as an exit discharge component in the means of egress system shall be maintained in accordance with the applicable building code.

1029.1.1 Bleachers. Bleachers, grandstands, and folding and telescopic seating shall be maintained in accordance with the applicable building code.

1029.1.1.1 Spaces under grandstands and bleachers. Fire-resistance-rated construction for spaces under grandstands and bleachers shall be maintained in accordance with Chapter 7.

1029.2 Assembly main exit. The assembly main exit shall be maintained in accordance with the applicable building code.

1029.3 Assembly other exits. Other assembly exits shall be maintained in accordance with the applicable building code.

1029.4 Foyers and lobbies. In Group A-1 occupancies, where persons are admitted to the building at times when seats are not available, such persons shall be allowed to wait in a lobby or similar space, provided such lobby or similar space shall not encroach upon the minimum width or required capacity of the means of egress. Such foyer, if not directly connected to a public street by all the main entrances or exits, shall be maintained with a straight and unobstructed path of travel to every such main entrance or exit in accordance with the applicable building code.

1029.5 Interior balcony and gallery means of egress. Interior balcony and gallery means of egress shall be maintained in accordance with the applicable building code.

1029.6 Capacity of aisle for assembly. The required capacity of aisles shall be maintained in accordance with the applicable building code.

1029.7 Travel distance. The exit access travel distance shall be maintained as approved in accordance with the applicable building code.

1029.8 Common path of egress travel. The common path of egress travel shall be maintained as approved in accordance with the applicable building code.

1029.8.1 Path through adjacent row. Paths through adjacent rows shall be maintained as approved in accordance with the applicable building code.

1029.9 Assembly aisles are required. Aisles leading to exits for every occupied portion of any building, room, or space used for assembly purposes that contains seats, tables, displays, similar fixtures, or equipment shall be maintained as approved in accordance with the applicable building code.

1029.9.1 Minimum aisle width. The minimum clear width for aisles shall be maintained in accordance with the applicable building code.

1029.9.2 Aisle catchment area. Aisle capacity and catchment areas shall be maintained as approved in accordance with the applicable building code.

1029.9.3 Converging aisles. Where aisles converge to form a single path of egress travel, the required capacity of that path shall be maintained to not less than that approved in accordance with the applicable building code.

1029.9.4 Uniform width and capacity. Where required by the applicable building code for aisles where egress is possible in either of two directions, uniform width and required capacity shall be maintained.

1029.9.5 Dead-end aisles. Dead-end aisles shall be maintained as approved by the applicable building code. Each end of an aisle shall remain unobstructed to a cross aisle, foyer, doorway, vomitory, concourse, or stairway having access to an exit where required by the applicable building code.

1029.9.6 Aisle measurement. The clear width for aisles shall be measured in accordance with the applicable building code.

1029.10 Transitions. Transitions between stairways and stepped aisles shall be maintained in accordance with the applicable building code.

1029.10.3 Transition marking. Distinctive marking stripes at each nosing or leading edge adjacent to the transition shall be maintained as approved in accordance with the applicable building code.

1029.12.1 Walking surface. The surface of aisles, stepped aisles, and ramped aisles required by the applicable building code to be of slip-resistant materials that are securely attached shall be maintained.

1029.12.2 Outdoor conditions. Outdoor aisles, stepped aisles, and ramped aisles and outdoor approaches to aisles, stepped aisles, and ramped aisles required by the applicable building code to be designed to prevent the accumulation of water shall be maintained as approved so that water will not accumulate on the walking surface. Outdoor aisles, stepped aisles, and ramped aisles and outdoor approaches to aisles, stepped aisles, and ramped aisles not regulated by the USBC shall be maintained so that water will not accumulate on the walking surface.

1029.13 Aisle accessways. Aisle accessways for seating at tables and seating in rows shall be maintained as approved in accordance with the applicable building code.

1029.14 Assembly aisle walking surfaces. Ramped and stepped aisles shall be maintained in accordance with the applicable building code.

1029.15 Seat stability. Where the applicable building code requires seats to be securely fastened to the floor or in groups, in a building, room, or space used for assembly purposes, seats shall be arranged and maintained as approved in accordance with the applicable building code.

1029.16 Handrails. Handrails serving ramped aisles shall be maintained in accordance with the applicable building code.

1029.17 Assembly guards. Guards required by the applicable building code adjacent to seating in a building, room, or space used for assembly purposes shall be maintained as approved in accordance with the applicable building code.

1029.17.1 Perimeter guards. Perimeter guards shall be maintained in accordance with the applicable building code.

SECTION 1030 EMERGENCY ESCAPE AND RESCUE

1030.1 General. Emergency escape and rescue openings of a building, including those in Groups R-2, R-3, R-4, and R-5 occupancies, shall be maintained in accordance with the applicable building code.

1030.2 Minimum size. Emergency escape and rescue openings shall be maintained to provide the minimum net clear opening area, height, and width in accordance with the applicable building code when normally operated.

1030.3 Maximum height from floor. Emergency escape and rescue opening height from the floor as measured in accordance with the applicable building code shall be maintained.

1030.4 Window wells. An emergency escape and rescue opening and associated window well shall be maintained in accordance with the applicable building code. Emergency escape and rescue openings shall remain able to be fully opened. Ladders or steps shall not be obstructed by the emergency escape and rescue opening or other objects.

1030.5 Bars, grilles, covers, and screens. Bars, grilles, covers, screens, or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided that the minimum net clear opening size complies with the applicable building code and such

devices shall be releasable or removable from the inside without the use of a key, tool, or force greater than that which is required for normal operation of the emergency escape and rescue opening.

SECTION 1031 MAINTENANCE OF THE MEANS OF EGRESS

1031.1 General. The means of egress for buildings or portions thereof shall be maintained in accordance with this section.

1031.2 Reliability. Unless otherwise permitted by the applicable building code, required exit accesses, exits, and exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency where the building area served by the means of egress is occupied. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress.

1031.2.1 Security devices and egress locks. Security devices and locking arrangements in the means of egress that restrict, control, or delay egress shall be maintained as required by this chapter.

1031.2.2 Locking arrangements in educational occupancies. In Group E occupancies, except Group E day care facilities and Group B educational occupancies, exit access doors from classrooms, offices, and other occupied rooms, except for exit doors and doors across corridors, shall be permitted to be provided with emergency supplemental hardware where all of the following conditions are met:

1. The door shall be capable of being opened from outside the room with a key, proprietary device provided by the manufacturer, or other approved means.

2. The door shall be openable from within the room in accordance with Section 1010.1.9, except emergency supplemental hardware is not required to comply with Chapter 11 of the VCC.

Note: School officials should consult with their legal counsel regarding provisions of the Americans with Disabilities Act of 1990 (42 USC § 12101 et seq.) and any other applicable requirements.

3. Installation of emergency supplemental hardware on fire door assemblies must comply with Section 716.2 of the VCC. Modifications shall not be made to listed panic hardware, fire door hardware, or door closures.

4. The emergency supplemental hardware shall not be capable of being used on other doors not intended to be used and shall have at least one component that requires modification to or is permanently affixed to the surrounding wall, floor, door, or frame assembly construction for it to properly function.

5. Employees shall engage in lockdown training procedures on how to deploy and remove the emergency supplemental hardware, and its use shall be incorporated in the approved lockdown plan complying with the SFPC.

6. The emergency supplemental hardware and its components shall be maintained in accordance with the SFPC.

7. Approved emergency supplemental hardware shall be of consistent type throughout a building.

Exception: The building official may approve alternate types of emergency supplemental hardware in accordance with Section 106.3 of the VCC when a consistent device cannot be installed.

1031.3 Obstructions. A means of egress shall be free from obstructions that would prevent its use, including the accumulation of snow and ice.

1031.3.1 Group I-2. In Group I-2, the required clear width for aisles, corridors, and ramps that are part of the required means of egress shall comply with Section 1020.2. The facility shall have a plan to maintain the required clear width during emergency situations.

Exception: In areas required for bed movement, equipment shall be permitted in the required width where all of the following provisions are met:

1. The equipment is low hazard and wheeled.

2. The equipment does not reduce the effective clear width for the means of egress to less than five feet (1525 mm).

3. The equipment is limited to:

3.1. Equipment and carts in use.

3.2. Medical emergency equipment.

3.3. Infection control carts.

3.4. Patient lift and transportation equipment.

4. Medical emergency equipment and patient lift and transportation equipment, when not in use, are required to be located on one side of the corridor.

5. The equipment is limited in number to not more than one per patient sleeping room or patient care room within each smoke compartment.

1031.4 Exit signs. Exit signs shall be maintained in accordance with Sections 1013 and 1203 and the applicable building code. Decorations, furnishings, equipment, or adjacent signage that impairs the visibility of exit signs, creates confusion, or prevents identification of the exit shall not be allowed.

1031.5 Nonexit identification. Where a door is adjacent to, constructed similar to, and can be confused with a means of egress door, that door shall be identified with an approved sign that identifies the room name or use of the room.

1031.6 Finishes, furnishings, and decorations. Means of egress doors shall be maintained in such a manner as to be distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as

doors. Furnishings, decorations, or other objects shall not be placed so as to obstruct exits, access thereto, egress therefrom, or visibility thereof. Hangings and draperies shall not be placed over exit doors or otherwise be located to conceal or obstruct an exit. Mirrors shall not be placed on exit doors. Mirrors shall not be placed in or adjacent to any exit in such a manner as to confuse the direction of exit.

1031.7 Emergency escape and rescue openings. Required emergency escape and rescue openings shall be maintained in accordance with the code that was in effect at the time of construction and both of the following:

1. Required emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools.

2. Bars, grilles, grates, or similar devices are allowed to be placed over emergency escape and rescue openings provided that the minimum net clear opening size complies with the code that was in effect at the time of construction, and such devices shall be releasable or removable from the inside without the use of a key, tool, or force greater than that which is required for normal operation of the emergency escape and rescue opening.

1031.8 Inspection, testing and maintenance. Two-way communication systems for areas of refuge shall be inspected and tested on a yearly basis to verify that all components are operational. Where required, the tests shall be conducted in the presence of the fire code official. Records of inspection, testing and maintenance shall be maintained.

1031.9 Floor identification signs. The floor identification signs shall be maintained in accordance with Section 1023.9 and the applicable building code.

1031.10 Emergency lighting equipment inspection and testing. Emergency lighting shall be maintained in accordance with Section 108 and shall be inspected and tested in accordance with Sections 1031.10.1 and 1031.10.2.

1031.10.1 Activation test. Emergency lighting equipment shall be tested monthly for a duration of not less than 30 seconds. The test shall be performed manually or by an automated self-testing and self-diagnostic routine. Where testing is performed by self-testing and self-diagnostics, a visual inspection of the emergency lighting equipment shall be conducted monthly to identify any equipment displaying a trouble indicator or that has become damaged or otherwise impaired.

1031.10.2 Power test. Battery-powered emergency lighting equipment shall be tested annually by operating the equipment on battery power for not less than 90 minutes.

1031.11 Emergency supplemental hardware. Emergency supplemental hardware shall be installed in accordance with the applicable building code and shall be maintained in accordance with this code, the conditions of its approval, and the manufacturer's instructions. The fire code official shall be authorized to revoke the use and storage of emergency supplemental hardware within a building for due cause based on failure to comply with requirements in this code or the applicable building code. Revocations shall be rescinded upon achieving compliance with this code and the applicable building code.

1031.12 Area of refuge. Areas of refuge shall be maintained in accordance with Sections 1009.6 and 1031.8 and the applicable building code. Designated areas shall be free of obstructions at all times and any required signs, instructions, or equipment shall be maintained.

1031.13 Door opening force. The force for pushing or pulling open interior swinging egress doors, other than fire doors, shall not exceed the maximum force permitted by the applicable building code. These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.

13VAC5-52-230. IFC Chapter 11 Construction Requirements for Existing Buildings.

Delete Chapter 11 in its entirety.

13VAC5-52-240. IFC Chapter 12 Energy Systems.

A. Make the following changes to Section 1201, General.

Change Sections 1201.1, 1201.2, and 1201.3 to read:

1201.1 Scope. The provisions of this chapter shall apply to the operation and maintenance of energy systems used for generating or storing energy. It shall not apply to equipment associated with the generation, control, transformation, transmission, or distribution of energy installations that is under the exclusive control of an electric utility or lawfully designated agency.

1201.2 Electrical wiring and equipment. Electrical wiring and equipment used in connection with energy systems shall be maintained in accordance with this chapter, Section 603, and the applicable building code.

1201.3 Mixed Systems. The aggregate nameplate kWh energy of all energy storage systems in a fire area shall not exceed the maximum quantity specified for any of the energy systems in the applicable building code and approved by the building official. Where required by the fire code official, a hazard mitigation analysis shall be provided and approved in accordance with Section 106.3 to evaluate any potential adverse interaction between the various energy systems and technologies.

B. Make the following changes to Section 1203, Emergency and Standby Power Systems.

1. Change Sections 1203.1 and 1203.1.1 to read:

1203.1 General. Emergency power systems and standby power systems shall comply with Sections 1203.1.1 through 1203.1.9.

1203.1.1 Generators. Emergency and standby power generators shall be listed.

2. Change Sections 1203.1.2 and 1203.1.3 to read:

1203.1.2 Fuel line piping protection. Fuel lines supplying a generator set inside a high-rise building shall be maintained in accordance with the applicable building code. Fire resistance ratings shall be maintained in accordance with Chapter 7.

1203.1.3 Installation. Emergency power systems and standby power systems shall be approved in accordance with the applicable building code.

3. Change Section 1203.1.4 to read:

1203.1.4 Load transfer. Emergency power systems shall automatically provide secondary power within 10 seconds after primary power is lost unless specified otherwise by the applicable building code. Standby power systems shall automatically provide secondary power within 60 seconds after primary power is lost unless specified otherwise by the applicable building code.

4. Change Section 1203.1.5 to read:

1203.1.5 Load duration. Emergency power systems and standby power systems shall be maintained to provide the required power for the minimum duration specified in the applicable building code without being refueled or recharged.

5. Change Section 1203.1.6 to read:

1203.1.6 Uninterruptable power source. An uninterrupted source of power shall be provided for equipment where required by the manufacturer's instructions, the listing, the applicable building code, or the applicable referenced standards.

6. Change Section 1203.1.7 to read:

1203.1.7 Interchangeability. Emergency power systems shall be an acceptable alternative for installations that require standby power systems when permitted by the applicable building code.

7. Delete Section 1203.1.8.

8. Change Section 1203.1.9 to read:

1203.1.9 Maintenance. Existing installations shall be maintained in accordance with the original approval and Section 1203.4.

9. Change Section 1203.2 to read:

1203.2 Specific equipment requirements. Emergency and standby power systems shall be maintained in accordance with Sections 1203.2.1 through 1203.2.18.

10. Change Section 1203.2.2 to read:

1203.2.2 Elevators and platform lifts. Standby power shall be maintained for elevators and platform lifts as required in Sections 604.3 and 1009.5.

11. Change Section 1203.2.3 to read:

1203.2.3 Emergency responder radio coverage systems. Standby power shall be maintained for emergency responder radio coverage systems in accordance with Section 510 and the applicable building code. Where specified in the applicable building code, the standby power supply shall be capable of operating the emergency responder radio coverage system at 100% system operation capacity for the duration specified in the applicable building code.

12. Change Section 1203.2.4 to read:

1203.2.4 Emergency voice or alarm communication systems. Emergency power shall be maintained for emergency voice or alarm communication systems as required by the applicable building code. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

13. Change Sections 1203.2.5 and 1203.2.6 to read:

1203.2.5 Exhaust ventilation. Where standby power for mechanical exhaust ventilation systems is provided or required by the applicable building code, the standby power shall be maintained.

1203.2.6 Exit signs. Emergency power for exit signs shall be capable of powering the required load for a duration of not less than 90 minutes unless otherwise specified by the applicable building code.

14. Change Section 1203.2.7 to read:

1203.2.7 Gas detection systems. Emergency power and standby power shall be maintained for gas detection systems in accordance with the applicable building code.

15. Change Section 1203.2.8 to read:

1203.2.8 Group I-2 occupancies. Essential electrical systems required by the applicable building code for Group I-2 occupancies shall be maintained in accordance with NFPA 70.

16. Change Section 1203.2.9 to read:

1203.2.9 Group I-3 occupancies. Where power-operated sliding doors or power-operated locks for swinging doors in Group I-3 occupancies are operable by a manual release mechanism at the door, and emergency power provided or required by the applicable building code, they shall be maintained.

17. Change Section 1203.2.10 to read:

1203.2.10 Hazardous materials. Emergency and standby power shall be maintained in accordance with NFPA 70 in occupancies with hazardous materials when required by the applicable building code.

18. Change Section 1203.2.11 to read:

1203.2.11 High-rise buildings. Standby power and emergency power shall be maintained for high-rise buildings in accordance with Section 1203 and the applicable building code.

19. Change Section 1203.2.12 to read:

1203.2.12 Horizontal sliding doors. Standby power shall be maintained in accordance with NFPA 70 for horizontal sliding doors as required by the applicable building code. The standby power supply shall have a capacity to operate not fewer than 50 closing cycles of the door unless otherwise specified by the applicable building code.

20. Change Section 1203.2.13 to read:

1203.2.13 Hydrogen fuel gas rooms. Standby power shall be maintained in accordance with NFPA 70 for hydrogen fuel gas rooms as required by the applicable building code.

21. Change Section 1203.2.14 to read:

1203.2.14 Laboratory suites. Standby or emergency power shall be maintained for laboratory suites in accordance with Section 1203 and the applicable building code.

22. Change Section 1203.2.15 to read:

1203.2.15 Means of egress illumination. Emergency power shall be maintained for means of egress illumination in accordance with the applicable building code.

23. Change Section 1203.2.16 to read:

1203.2.16 Membrane structures. Standby power shall be maintained for auxiliary inflation systems in permanent membrane structures in accordance with the applicable building code. Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated membrane structures in accordance with Section 3103.10.4.

24. Change Section 1203.2.17 to read:

1203.2.17 Semiconductor fabrication facilities. Emergency power shall be maintained in accordance with NFPA 70 for semiconductor fabrication facilities as required by the applicable building code.

25. Change Section 1203.2.18 to read:

1203.2.18 Smoke control systems. Standby power shall be maintained in accordance with NFPA 70 for smoke control as required by the applicable building code.

26. Change Section 1203.2.19 to read:

1203.2.19 Underground buildings. Emergency and standby power shall be maintained in accordance with NFPA 70 in underground buildings as required by the applicable building code.

27. Change Section 1203.3 to read:

1203.3 Critical circuits. Cables used for survivability of required critical circuits shall be listed. Electrical circuit protective systems shall be maintained in accordance with their listing requirements.

28. Change Section 1203.4 to read:

1203.4 Maintenance. Emergency and standby power systems shall be maintained in accordance with NFPA 70, NFPA 110, and NFPA 111 so that the system is capable of supplying service within the time specified for the type and duration required in accordance with the applicable building code.

29. Change Section 1203.5 to read:

1203.5 Operational inspection and testing. Emergency power systems, including all appurtenant components, shall be inspected and tested under load in accordance with NFPA 70, NFPA 110, and NFPA 111.

Exception: Where the emergency power system is used for standby power or peak load shaving, such use shall be recorded and shall be allowed to be substituted for scheduled testing of the generator set, provided that appropriate records are maintained.

30. Add Section 1203.7 to read:

1203.7 Testing of battery powered emergency lights and exit signs. Required emergency lighting utilizing battery powered emergency lights, exit signs, or both shall be tested annually. The emergency lights and exit signs shall be tested for proper operation for the time period established in the building code in effect when the equipment was installed. Written records of tests shall be retained by the owner of the building for a minimum of two years after the test is conducted and shall be made available to the fire code official upon request.

C. Make the following changes to Section 1205, Solar Photovoltaic Power Systems.

1. Change Section 1205.1 to read:

1205.1 General. Solar photovoltaic power systems shall be maintained in accordance with Sections 1204.2 through 1204.5 and the applicable building code.

2. Change Section 1205.2 to read:

1205.2 Access and pathways. Roof access, pathways, and spacing requirements shall be maintained in accordance with the applicable building code. Pathways shall remain capable of supporting the loads required by the applicable building code. Pathways shall be maintained unobstructed and free from vent pipes, conduit, or mechanical equipment unless otherwise approved in accordance with the applicable building code.

3. Delete Section 1205.3.3 and change Section 1205.2.1 to read:

1205.2.1 Roof access points. Roof access points shall be maintained in areas that do not require placement of ground ladders over openings, such as windows or doors and located at strong points of building construction in locations where the access point does not conflict with overhead obstructions such as tree limbs, wires, or signs.

4. Change Section 1205.5 to read:

1205.5 Ground-mounted photovoltaic arrays. A clear, brush-free area of 10 feet (3048 mm) shall be maintained for ground-mounted photovoltaic arrays.

D. Make the following changes to Section 1206, Stationary Fuel Cell Power Systems.

1. Change Section 1206.1 to read:

1206.1 General. Stationary fuel cell power systems shall be maintained in accordance with this section and the applicable building code.

2. Delete Sections 1206.2 and 1206.3.

3. Change Section 1206.4 to read:

1206.4 Maintenance. Installation of stationary fuel cell power systems shall be approved by the building official and shall be maintained in accordance with the applicable building code, NFPA 70, and NFPA 853, the manufacturer's instructions, and the listing. Stationary fuel cell power systems fueled by hydrogen shall be maintained in accordance with the applicable building code, NFPA 2, and NFPA 70, the manufacturer's installation instructions, and the listing.

4. Delete Sections 1206.6.1, 1206.6.2, and 1206.13.1 and change Sections 1206.5, 1206.6, and 1206.8 through 1206.13 to read:

1206.5 Residential use. Stationary fuel cell power systems shall not be operated in Group R-3, R-4, and R-5 buildings or dwelling units associated with Group R-2 buildings unless they are specifically listed for residential use and approved in accordance with the applicable building code.

1206.6 Indoor installations. Stationary fuel cell power systems operated in indoor locations shall be specifically listed and labeled for indoor use and comply with the applicable building code. For purposes of this section, an indoor location includes a roof and 50% or greater enclosing walls.

1206.8 Outdoor installation. Separation required by the applicable building code for outdoor stationary fuel cell power systems shall be maintained from the following:

1. Lot lines.

2. Public ways.

3. Buildings.

4. Stored combustible materials.

5. Hazardous materials.

6. High-piled stock.

7. Any portion of a designated means of egress system.

8. Other exposure hazards.

1206.9 Fuel supply. The fuel supply for stationary fuel cell power systems shall be maintained in accordance with Chapter 53, Chapter 58, and the applicable building code and based on the particular fuel being supplied to the system.

1206.10 Manual shutoff. Access to a manual shutoff valves shall not be obstructed. Manual shutoff valves shall be maintained in accordance with the applicable building code.

1206.11 Ventilation and exhaust. Ventilation and exhaust for stationary fuel cell power systems shall be operated and maintained in accordance with NFPA 853 and the applicable building code.

1206.12 Fire suppression. Fire suppression for stationary fuel cell power systems shall be maintained in accordance with Chapter 9 and NFPA 853.

1206.13 Gas detection systems. Gas detection systems for stationary fuel cell power systems shall be maintained in accordance with Chapter 9 and the applicable building code.

E. Make the following changes to Section 1207, Electrical Energy Storage Systems.

1. Change Sections 1207.1.2, 1207.1.3, and 1207.1.4 to read:

1207.1.2 Permits. Permits shall be required as set forth in Section 107.2.

1207.1.3 Documents. At the minimum, the following information shall be provided with the operational permit application:

1. Location and layout diagram of the room or area in which the energy storage system (ESS) is located.

2. Details on the hourly fire-resistance ratings of assemblies enclosing the ESS.

3. The quantities and types of ESS.

4. Manufacturer’s specifications, ratings, and listings of each ESS.

5. Description of energy (battery) management systems and their operation.

6. Location and content of required signage.

7. Details on fire suppression, smoke or fire detection, thermal management, ventilation, exhaust, and deflagration venting systems, if provided.

8. Support arrangement, including any required seismic restraint.

9. A decommissioning plan in accordance with Section 1207.2.3.

1207.1.4 Hazard mitigation analysis. As part of the operational permit application, a failure modes and effects analysis (FMEA) or other hazard mitigation analysis approved in accordance with the applicable building code shall be provided to the fire official under any of the following conditions:

1. Where ESS technologies not specifically in Table 1207.1.1 are provided.

2. More than one ESS technology is provided in a room or enclosed area where there is a potential for adverse interaction between technologies.

3. Where allowed as a basis for increasing maximum allowable quantities in accordance with the applicable building code.

The FMEA shall be prepared by a qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the fire code official and shall analyze the fire safety properties of the design, operation, or use of the building or premises and the facilities and appurtenances situated thereon to recommend necessary changes. The fire code official is authorized to require that the FMEA be prepared by and bear the stamp of a registered design professional.

2. Delete Sections 1207.1.4.1 and 1207.1.4.2.

3. Change Sections 1207.1.4.3, 1207.1.5, and 1207.2.1 to read:

1207.1.4.3 Additional protection measures. Equipment and systems that are required for the ESS to comply with the hazardous mitigation analysis shall be maintained in accordance with the applicable building code.

1207.1.5 Large-scale fire test. ESS approved by the building official based on large-scale fire testing conducted or witnessed and reported by an approved testing laboratory in accordance with the applicable building code shall be maintained such that a fire involving one ESS will not propagate to an adjacent ESS, and where installed within buildings, enclosed areas, and walk-in units will be contained within the room, enclosed area, or walk-in unit for a duration equal to the fire-resistance rating of the room separation specified in the applicable building code.

1207.2.1 Commissioning. Prior to operational permit issuance, newly installed ESS and existing ESS that have been retrofitted, replaced, or previously decommissioned and are returning to service shall be commissioned in accordance with the applicable building code. The fire official shall be provided, upon request, with documentation of personnel who are qualified to service, maintain, and decommission the ESS and respond to incidents involving the ESS, including documentation that such service has been contracted for.

Exception: Commissioning shall not be required for lead-acid and nickel-cadmium battery systems at facilities under the exclusive control of communications utilities that comply with NFPA 76 and operate at less than 50 volts alternating current (VAC) and 60 volts direct current (VDC). A decommissioning plan shall be provided and maintained where required by the fire code official.

4. Delete Section 1207.2.1.1.

5. Change Sections 1207.2.1.2, 1207.2.3, 1207.3.3, 1207.3.4, 1207.3.5, and 1207.3.6 to read:

1207.2.1.2 Commissioning report. A report describing the results of the system commissioning, including the results of the initial acceptance testing required by the applicable building code, shall be provided to the fire code official, upon request. A copy of the report shall be maintained at an approved on-site location.

1207.2.3 Decommissioning. Decommissioning shall be performed in accordance with the decommissioning plan approved in accordance with the applicable building code. The fire code official shall also be notified by the ESS owner prior to the decommissioning of an ESS.

1207.3.3 Utility interactive systems. When required by the applicable building code, inverters shall be listed and labeled in accordance with UL 1741. Only inverters listed and labeled for utility interactive system use and identified as interactive shall be allowed to operate in parallel with the electric utility power system to supply power to common loads.

1207.3.4 Energy storage management system. Approved energy storage management systems required by the ESS listing that monitor and balance cell voltages, currents, and temperatures within the manufacturer's specifications shall be maintained. The system shall disconnect electrical connections to the ESS or otherwise place it in a safe condition if potentially hazardous temperatures or other conditions, such as short circuits, over voltage, or under voltage are detected.

1207.3.5 Enclosures. Enclosures of ESS shall be maintained in accordance with the applicable building code.

1207.3.6 Repairs or Alterations. Repairs or alterations of ESS shall only be done by qualified personnel. Repairs and alterations shall be in accordance with the applicable building code. Repairs shall be documented in the service records log.

6. Delete Sections 1207.3.7, 1207.3.7.1, 1207.3.8, and 1207.3.9.

7. Change Sections 1207.4, 1207.4.2, and 1207.4.3 to read:

1207.4 General maintenance requirements. Stationary and mobile ESS shall comply with the requirements of Sections 1207.4.1 through 1207.4.12.

1207.4.2 Working clearances. Access and working space shall be maintained about all electrical equipment to permit ready and safe operation and maintenance of such equipment in accordance with the applicable NFPA 70 and the manufacturer's instructions.

1207.4.3 Fire-resistance-rated separations. Fire-resistance-rated separations for rooms and other indoor areas containing ESS shall be maintained in accordance with the applicable building code and Chapter 7.

8. Delete Section 1207.4.4.

9. Change Sections 1207.4.7, 1207.4.10, and 1207.4.11 to read:

1207.4.7 Toxic and highly toxic gases. Hazardous exhaust systems for ESS that have the potential to release toxic and highly toxic gas during charging, discharging, and normal use conditions shall be operated and maintained.

1207.4.10 Occupied work centers. Cabinets containing electrochemical ESS located in rooms or areas occupied by personnel not directly involved with maintenance, service, and testing of the systems shall be secured and provided with signage complying with Section 1207.4.8.

1207.4.11 Open rack installations. Where electrochemical ESS are located in a separate equipment room and only authorized personnel have access to the room, electrochemical ESS shall be permitted to be located on an open rack for ease of maintenance.

10. Delete Table 1207.5 Maximum Allowable Quantities of Electrochemical ESS.

11. Change Sections 1207.5, 1207.5.1, 1207.5.2, 1207.5.2.1, 1207.5.3 (Items 1 and 2 remain), 1207.5.4, 1207.5.4.1, 1207.5.5, 1207.5.5.1, 1207.5.6, and 1207.5.8 to read:

1207.5 Electrochemical ESS protection. The protection of electrochemical ESS shall be maintained in accordance with Sections 1207.5.1 through 1207.5.8.

1207.5.1 Size and separation. The configuration and size of electrochemical ESS groups approved in accordance with the applicable building code shall be maintained in accordance with the applicable building code. The separation between different electrochemical ESS groups and between electrochemical ESS and walls in the storage room or area shall be maintained in accordance with the applicable building code.

1207.5.2 Maximum allowable quantities. Fire areas within rooms, areas, and walk-in units containing electrochemical ESS shall not exceed the maximum allowable quantities in the applicable building code.

1207.5.2.1 Mixed electrochemical energy systems. Where rooms, areas, and walk-in units contain different types of electrochemical energy technologies, the total aggregate quantities of the systems shall not exceed those allowed by the applicable building code.

1207.5.3 Elevation. Unless otherwise approved in accordance with the applicable building code, electrochemical ESS shall not be located in the following areas:

1207.5.4 Fire detection. Where required or provided in accordance with the applicable building code, approved automatic smoke detection systems or radiant energy-sensing fire detection systems installed in rooms, indoor areas, and walk-in units containing electrochemical ESS, shall be maintained in accordance with Chapter 9 and the applicable building code. Where required or provided in accordance with the applicable building code, approved radiant energy-sensing fire detection systems installed to protect open parking garage and rooftop, installations shall be maintained in accordance with Chapter 9 and the applicable building code. Where required or provided in accordance with the applicable building code, signals from detection systems shall continue to be transmitted to a central station, proprietary, or remote station service in accordance with NFPA 72 or, where approved, to a constantly attended location.

1207.5.4.1 System status. Where required or provided in accordance with the applicable building code, visible annunciation provided on cabinet exteriors or in other approved locations to indicate that potentially hazardous conditions associated with the ESS exist shall be maintained in accordance with the applicable building code.

1207.5.5 Fire suppression systems. Automatic fire suppression systems required by the applicable building code for rooms and areas within buildings and walk-in units containing electrochemical ESS shall be maintained in accordance with Chapter 9 and the applicable building code.

1207.5.5.1 Water-reactive systems. Alternative automatic fire-extinguishing systems approved in accordance with the applicable building code, based on large-scale fire testing for the protection of electrochemical ESS that utilize water-reactive materials shall be maintained in accordance with the applicable building code.

1207.5.6 Maximum enclosure size. Unless otherwise approved in accordance with the applicable building code, outdoor walk-in units housing ESS shall not exceed 53 feet by 8.0 feet by 9.5 feet high (16,154 mm × 2438 mm × 2896 mm), not including bolt-on HVAC and related equipment. Outdoor walk-in units exceeding these limitations shall be considered indoor installations and comply with the requirements in Section 1207.7.

1207.5.8 Means of egress separation. ESS located outdoors and in open parking garages shall continue to be separated from any means of egress in accordance with the applicable building code to ensure safe egress under fire conditions.

12. Delete Table 1207.6 Electrochemical ESS Technology-Specific Requirements.

13. Change Sections 1207.6, 1207.6.1, 1207.6.1.1, 1207.6.1.2, and 1207.6.1.2.1 to read:

1207.6 Electrochemical ESS technology-specific protection. Electrochemical ESS installations shall be maintained in accordance with this section and the applicable building code.

1207.6.1 Exhaust ventilation. Where required or provided in accordance with the applicable building code, exhaust ventilation of rooms, areas, and walk-in units containing electrochemical ESS shall be maintained in accordance with the applicable building code.

1207.6.1.1 Ventilation based on LFL. Where required or provided in accordance with the applicable building code, exhaust ventilation systems designed to limit the maximum concentration of flammable gas to 25% of the lower flammable limit (LFL) of the total volume of the room, area, or walk-in unit during the worst-case event of simultaneous charging of batteries at the maximum charge rate shall be maintained in accordance with the applicable building code.

1207.6.1.2 Ventilation based on exhaust rate. Continuous mechanical exhaust ventilation, or activated by a gas detection system required by the applicable building code to be provided at a rate of not less than one $ft^3/min/ft^2$ (5.1 $L/sec/m^2$) of floor area of the room, area, or walk-in unit shall be maintained in accordance with the applicable building code.

1207.6.1.2.1 Standby power. Where standby power is required by the applicable building code for exhaust ventilation, the standby power shall be maintained in accordance with the applicable building code.

14. Delete Section 1207.6.1.2.2.

15. Change Sections 1207.6.1.2.3, 1207.6.1.2.4, and 1207.6.2 to read:

1207.6.1.2.3 Supervision. Where mechanical exhaust ventilation systems are required by the applicable building code to be supervised by an approved central station, proprietary, or remote station service in accordance with the applicable NFPA 72, the system shall continue to be supervised. Or, the system shall initiate an audible and visible signal at an approved constantly attended onsite location in accordance with the applicable building code.

1207.6.1.2.4 Gas detection system. Continuous gas detection systems required by the applicable building code for rooms, areas, and walk-in units containing ESS shall be maintained in accordance with the applicable building code.

1207.6.2 Spill control and neutralization. Spill control and neutralization required by the applicable building code for areas containing free-flowing liquid electrolyte or hazardous materials shall be maintained in accordance with the applicable building code.

16. Delete Sections 1207.6.2.1 and 1207.6.2.2.

17. Change Sections 1207.6.3, 1207.6.4, and 1207.6.5 to read:

1207.6.3 Explosion control. Explosion control shall be maintained in accordance with Chapter 9 and the applicable building code.

1207.6.4 Safety caps. Flame-arresting safety caps for vented batteries provided or required in accordance with the applicable building code, shall be maintained.

1207.6.5 Thermal runaway. Where the applicable building code requires batteries and other ESS to be provided with a listed device or other approved method to prevent, detect, and minimize the impact of thermal runaway, such listed devices or approved methods shall be maintained in accordance with the applicable building code.

18. Delete Table 1207.7 Indoor ESS Installations.

19. Change Sections 1207.7, 1207.7.1, 1207.7.2, 1207.7.3, and 1207.7.4 to read:

1207.7 Indoor installations. Indoor ESS installations shall be maintained in accordance with the applicable building code.

1207.7.1 Dedicated-use buildings. Buildings classified as Group F-1 occupancies and approved as dedicated-use ESS buildings in accordance with the applicable building code shall only be used and occupied as approved.

1207.7.2 Nondedicated-use buildings. Buildings that contain ESS and were approved as nondedicated-use buildings in accordance with the applicable building code shall be used or occupied as approved.

1207.7.3 Dwelling units and sleeping units. Unless otherwise approved in accordance with the applicable building code, ESS shall not be allowed in sleeping units or in habitable spaces of dwelling units.

1207.7.4 Fire-resistance-rated separations. Fire-resistance-rated separations for rooms and areas containing ESS, required by the applicable building code, shall be maintained in accordance with the applicable building code.

20. Delete Table 1207.8 Outdoor ESS Installations.

21. Change Sections 1207.8, 1207.8.1, 1207.8.2, 1207.8.3 (Items 1 through 7 remain), and 1207.8.4 to read:

1207.8 Outdoor installations. Outdoor installations shall be maintained in accordance with the applicable building code.

1207.8.1 Remote outdoor installations. For the purpose of Section 1207.8, ESS located more than 100 feet (30,480 mm) from buildings, lot lines, public ways, stored combustible materials, hazardous materials, high-piled stock, and other exposure shall be considered remote outdoor installations.

1207.8.2 Installations near exposures. For the purpose of Section 1207.8, all outdoor ESS installations that do not

meet the criteria set forth by Section 1207.8.1, shall be considered installations near exposures.

1207.8.3 Clearance to exposures. Where the applicable building code requires a minimum of 10 feet (3,048 mm) separation between ESS located outdoors and the following exposures, the separation shall be maintained in accordance with the applicable building code.

1207.8.4 Exterior wall installations. Where the applicable building code allows ESS to be installed outdoors on exterior walls of buildings, the exterior walls shall be maintained in accordance with the applicable building code.

22. Delete Table 1207.9 Special ESS Installations.

23. Change Sections 1207.9, 1207.9.1, 1207.9.2, 1207.9.3 (Items 1 through 8 remain), 1207.9.4, 1207.9.5, and 1207.9.6 to read:

1207.9 Special installations. Rooftop and open parking garage ESS installations shall be maintained in accordance with the applicable building code.

1207.9.1 Rooftop installations. For the purpose of Section 1207.9, rooftop ESS installations are those located on the roofs of buildings.

1207.9.2 Open parking garage installations. For the purpose of Section 1207.9, open parking garage ESS installations are those located in a structure or portion of a structure that complies with the Open Parking Garage provisions set forth by the applicable building code.

1207.9.3 Clearance to exposures. Where the applicable building code requires a minimum of 10 feet (3048 mm) separation between ESS located on rooftops or in open parking garages and the following exposures, the separation shall be maintained in accordance with the applicable building code.

1207.9.4 Fire suppression systems. Automatic fire suppression systems required by the applicable building code for the following, shall be maintained in accordance with Chapter 9 and the applicable building code:

1. Automatic fire suppression systems, installed within the ESS enclosure, for ESS located in walk-in units on rooftops.

2. Automatic fire suppression systems, installed within the ESS enclosure, for ESS located in walk-in units in open parking garages.

3. Automatic fire suppression systems in areas containing ESS other than walk-in units in open parking structures on levels not open above to the sky.

1207.9.5 Rooftop installations. The following features required by the applicable building code for ESS and associated equipment that are located on rooftops and not enclosed by building construction shall be maintained in accordance with the applicable building code.

1. Stairway access to the roof for emergency response and fire department personnel provided either through a bulkhead from the interior of the building or a stairway on the exterior of the building.

2. Service walkways provided for service and emergency personnel from the point of access to the roof to the system.

3. Distance required by the applicable building code between ESS and associated equipment and the edge of the roof.

4. The roofing materials under and within the horizontal distance specified by the applicable building code from an ESS or associated equipment.

5. Class I standpipe outlets installed at an approved location on the roof level of the building or in the stairway bulkhead at the top level.

6. The ESS separation from the fire service access point on the rooftop.

1207.9.6 Open parking garages. ESS and associated equipment that are located in open parking garages shall be maintained in accordance with the applicable building code.

24. Delete footnotes "b", "c", "d", and "e" from Table 1207.10 Mobile Energy Storage Systems (ESS).

25. Change Sections 1207.10.3, 1207.10.4, 1207.10.4.1 (Items 1 through 10 remain), and 1207.10.5 to read:

1207.10.3 Permits. Permits shall be required as set forth in Section 107.2.

1207.10.4 Documents. Documents complying with Section 1207.1.3 shall be provided with the operational permit application for mobile ESS charging and storage locations.

1207.10.4.1 Deployment documents. At the minimum, the following information shall be provided with the operational permit applications for mobile ESS deployments:

1207.10.5 Approved locations. Locations where mobile ESS are charged, stored, and deployed shall be restricted to the locations approved in accordance with the applicable building code and identified on the operational permits.

26. Change Exceptions 1 and 2 of Section 1207.10.6 to read:

Exceptions:

1. Electrical connections permitted by the applicable building code to be made using temporary wiring complying with the manufacturer's instructions, the UL 9540 listing, and NFPA 70 shall be maintained in accordance with the applicable building code.
2. Fire suppression system connections to the water supply permitted by the applicable building code to use approved

temporary connections, shall be maintained in accordance with the applicable building code.

27. Change Sections 1207.10.7.2, 1207.10.7.3, 1207.10.7.4, 1207.10.7.5, and 1207.10.7.6 to read:

1207.10.7.2 Restricted locations. Unless otherwise approved in accordance with the applicable building code, mobile ESS operations shall not be located indoors, in covered parking garages, on rooftops, below grade, or under building overhangs.

1207.10.7.3 Clearance to exposures. Where the applicable building code requires a minimum of 10 feet (3048 mm) separation between deployed mobile ESS and the following exposures, the separation shall be maintained in accordance with the applicable building code.

1. Public ways.

2. Buildings.

3. Stored combustible materials.

4. Hazardous materials.

5. High-piled storage.

6. Other exposure hazards.

Where the applicable building code requires deployed mobile ESS to be separated by a minimum of 50 feet (15,240 mm) from public seating areas and from tents, canopies, and membrane structures with an occupant load of 30 or more, the separation shall be maintained.

1207.10.7.4 Electrical connections. Electrical connections shall be maintained in accordance with the manufacturer's instructions, the UL 9540 listing, and the applicable building code. Temporary wiring for electrical power connections shall comply with NFPA 70. Unless otherwise allowed by the applicable building code, fixed electrical wiring shall not be provided.

1207.10.7.5 Local staging. Mobile ESS in transit from the charging and storage location to the deployment location and back shall not be parked within 100 feet (30,480 mm) of an occupied building for more than one hour during transit, unless specifically approved by the fire code official when the operational permit is issued.

1207.10.7.6 Fencing. Fences with locked gates or other approved barriers required or provided in accordance with the applicable building code to keep the general public at least five feet (1524 mm) from the outer enclosure of a deployed mobile ESS shall be maintained in accordance with the applicable building code.

28. Change Sections 1207.11, 1207.11.1, 1207.11.2, 1207.11.2.1, 1207.11.3, 1207.11.4 (Items 1 through 4 remain), 1207.11.5, 1207.11.6, 1207.11.7, 1207.11.8, 1207.11.9, and 1207.11.10 to read:

1207.11 ESS in Group R-3 and R-4 occupancies. ESS in Group R-3 and R-4 occupancies shall be maintained in accordance with Sections 1207.11.1 through 1207.11.9. The temporary use of an owner's or occupant's electric-powered vehicle as an ESS shall be in accordance with Section 1207.11.10.

1207.11.1 Equipment listings. ESS shall be listed and labeled in accordance with UL 9540. Unless otherwise approved in accordance with the applicable building code, ESS listed and labeled solely for utility or commercial use shall not be used for residential applications.

1207.11.2 Maintenance. ESS shall be maintained in accordance with the manufacturer's instructions, their listing, and the applicable building code.

1207.11.2.1 Spacing. Where individual units are required by the applicable building code to be separated from each other by at least three feet (914 mm) of spacing unless smaller separation distances are documented to be adequate based on large-scale fire testing, the separation shall be maintained in accordance with the applicable building code.

1207.11.3 Location. Unless otherwise approved in accordance with the applicable building code, ESS shall be located only in the following locations:

1. Detached garages and detached accessory structures.

2. Attached garages separated from the dwelling unit living space and sleeping units in accordance with Section 406.3.2 of the Virginia Construction Code.

3. Outdoors on exterior walls located a minimum of three feet (914 mm) from doors and windows.

4. Utility closets and storage or utility spaces within dwelling units and sleeping units.

1207.11.4 Energy ratings. Unless otherwise approved in accordance with the applicable building code, individual ESS units shall have a maximum rating of 20 kWh. The aggregate rating structure shall not exceed:

1207.11.5 Inverters. Where required by the applicable building code, inverters shall be listed and labeled in accordance with UL 1741 or provided as part of the UL 9540 listing. Systems connected to the utility grid shall use inverters listed for utility interaction in accordance with the applicable building code.

1207.11.6 Fire detection. Smoke alarms required by the applicable building code for rooms and areas within dwellings units, sleeping units, and attached garages in which ESS are installed shall be maintained in accordance with Chapter 9 and the applicable building code. Where smoke alarms cannot be installed based on their listing, heat detectors listed and interconnected to the smoke alarms installed in accordance with the applicable building code within dwelling units, sleeping units, and attached garages shall be maintained in accordance with Chapter 9 and the applicable building code.

1207.11.7 Protection from impact. Stationary storage battery systems installed in a location subject to vehicle

damage shall be protected by approved barriers. Appliances in garages installed in accordance with the applicable building code shall be maintained in accordance with the applicable building code.

1207.11.8 Ventilation. Exhaust ventilation installed in accordance with the applicable building code for indoor installations of ESS that include batteries that produce hydrogen or other flammable gases during charging shall be operated and maintained in accordance with the applicable building code.

1207.11.9 Toxic and highly toxic gas. Unless otherwise approved in accordance with the applicable building code, ESS that have the potential to release toxic or highly toxic gas during charging, discharging, and normal use conditions shall not be installed within Group R-3 or R-4 occupancies.

1207.11.10 Electric vehicle use. The temporary use of an owner's or occupant's electric-powered vehicle to power a dwelling unit or sleeping unit while parked in an attached or detached garage or outside shall comply with the vehicle manufacturer's instructions and the applicable NFPA 70.

13VAC5-52-250. IFC Chapter 20 Aviation Facilities.

A. The following change shall be made to Section 2001, General:

Change Section 2001.3 to read:

2001.3 Permits. For permits to operate aircraft-refueling vehicles, application of flammable or combustible finishes, and hot work, see Section 107.2.

B. The following changes shall be made to Section 2007, Helistops and Heliports:

1. Change Section 2007.1 to read:

2007.1 General. Helistops and heliports shall be maintained in accordance with Sections 2007.2 through 2007.8.

2. Change Section 2007.4 to read:

2007.4 Exits. Exits and stairways shall be maintained in accordance with Chapter 10 and the applicable building code.

3. Change Section 2007.5 to read:

2007.5 Standpipe systems. A building with a rooftop helistop or heliport provided with a Class I or Class III standpipe system shall be maintained in accordance with Chapter 9 and the applicable code.

4. Change Section 2007.6 to read:

2007.6 Foam protection. Where provided or required by the applicable building code, foam fire-protection capabilities shall be maintained for rooftop heliports. Such systems shall be maintained in accordance with the applicable provisions of Chapter 9 and the applicable building code.

13VAC5-52-260. IFC Chapter 21 Dry Cleaning.

A. The following change shall be made to Section 2101, General:

Change Section 2101.2 to read:

2101.2 Permit required. Permits shall be required as set forth in Section 107.2.

B. The following change shall be made to Section 2103, Classifications:

Change Section 2103.3 to read:

2103.3 Design. The occupancy classification, design, and construction of dry cleaning plants shall be maintained in accordance with the applicable building code.

C. The following changes shall be made to Section 2104, General Requirements:

1. Change Section 2104.2.1 to read:

2104.2.1 Ventilation. Ventilation shall be operated and maintained. Ventilation systems provided shall remain in accordance with the applicable building code.

2. Change Section 2104.2.3 to read as follows:

2104.2.3 Electrical wiring and equipment. Electrical wiring and equipment in dry cleaning rooms or other locations subject to flammable vapors shall be maintained in accordance with the applicable provisions of NFPA 70 and Chapter 6. Where provided, such systems and equipment shall comply with the applicable building code.

D. The following changes shall be made to Section 2105, Operating Requirements:

1. Change Section 2105.2.3 to read:

2105.2.3 Ventilation. Ventilation shall be operated and maintained. Ventilation systems provided shall remain in accordance with the applicable building code.

2. Change Section 2105.3 to read:

2105.3 Type IV and Type V systems. Type IV and Type V dry cleaning systems shall be maintained in accordance with the applicable building code.

E. The following change shall be made to Section 2106, Spotting and Pretreating:

Change Section 2106.3 to read as follows:

2106.3 Class II or Class III solvents. Scouring, brushing, and spotting and pretreating shall be permitted to be conducted with Class II or Class III solvents. The maximum quantity of Class II or Class III solvents permitted at any work station shall be one gallon (4 L). In other than Group H-2 occupancy, the aggregate quantities of solvents shall not exceed the maximum allowable

quantity per control area for use-open system in accordance with the applicable building code.

F. The following changes shall be made to Section 2107, Dry Cleaning Systems:

1. Change Section 2107.1 to read as follows:

2107.1 General equipment requirements. Dry cleaning systems, including dry cleaning units, washing machines, stills, drying cabinets, tumblers, and their appurtenances, including pumps, piping, valves, filters, and solvent coolers, shall be maintained in accordance with NFPA 32.

2. Change Section 2107.2 to read:

2107.2 Type II systems. Unless otherwise approved by the applicable building code, Type II dry cleaning and solvent tank storage rooms shall not be operated below grade or above the lowest floor level of the building and shall be maintained in accordance with Sections 2107.2.1 through 2107.2.3.

Exception: Solvent storage tanks installed underground, in vaults, or in special enclosures in accordance with Chapter 57.

3. Change Sections 2107.2.1 and 2107.2.2 to read:

2107.2.1 Firefighting access. Where required by the applicable building code, access shall be maintained from one side of Type II dry cleaning rooms for firefighting and fire control purposes in accordance with Section 503.

2107.2.2 Number of means of egress. The number and means of egress for Type II dry cleaning rooms shall be maintained in accordance with the applicable building code.

4. Change Section 2107.2.3 to read as follows:

2107.2.3 Spill control and secondary containment. Curbs, drains, or other provisions for spill control and secondary containment shall be maintained in accordance with Section 5004.2 to collect solvent leakage and fire protection water as approved in accordance with the applicable building code.

5. Change Section 2107.3 to read as follows:

2107.3 Solvent storage tanks. Solvent storage tanks for Class II, Class IIIA, and Class IIIB liquids shall be maintained in accordance with Chapter 57 and as approved in accordance with the applicable building code.

Exception: As provided in applicable provisions of NFPA 32 for inside storage or treatment tanks.

G. The following changes shall be made to Section 2108, Fire Protection:

1. Change Section 2108.1 to read:

2108.1 General. Fire protection systems, devices, and equipment shall be inspected, tested, and maintained in accordance with Chapter 9.

2. Change Section 2108.2 to read:

2108.2 Automatic sprinkler system. Automatic sprinkler systems required or provided for dry cleaning plants containing Type II, Type III-A, or Type III-B dry cleaning systems shall be maintained in accordance with Chapter 9. Where special conditions were required by the applicable building code, in order to not install an automatic sprinkler system, those conditions shall be maintained.

3. Delete Section 2108.3.

13VAC5-52-270. IFC Chapter 22 Combustible Dust-Producing Operations.

A. Change Section 2201.2 to read:

2201.2 Permits. Permits shall be required for combustible dust-producing operations as set forth in Section 107.2.

B. Change Sections 2203.2 through 2203.2.1.3 to read:

2203.2 Dust-producing and dust-handling equipment. Dust-producing equipment and dusthandling equipment, including vacuums, dust collection systems, dryers, mixers, blenders, separators, conveyors, storage containers, silos, or other similar devices listed in accordance with the applicable building code shall be maintained in accordance with the applicable building code.

2203.2.1 Signages and markings. Signages and markings shall be maintained in accordance with the applicable building code.

2203.2.1.1 Deflagration vent discharge area markings. Where dust collection systems and other equipment, systems, or system components are provided with deflagration vents, the area within the deflagration vent's discharge area shall continue to be marked in an approved manner in accordance with the applicable building code.

2203.2.1.2 Caution signs. Signs required by the applicable building code to read as follows and be posted near the dust-containing equipment with deflagration vents, shall be maintained:

CAUTION: THIS EQUIPMENT CAN CONTAIN EXPLOSIVE DUST.

KEEP OUTSIDE THE MARKED AREA WHILE EQUIPMENT IS OPERATING.

2203.2.1.3 Warning signs. Vent closure markings that read "WARNING: EXPLOSION RELIEF DEVICE. STAY CLEAR" required by the applicable building code where dust collection systems and other equipment, systems, or system components are provided with deflagration vents, shall be maintained.

C. Change Section 2203.3 to read:

2203.3 Dust-collection and dust-conveying systems. Dust-collection and dust-conveying systems shall be

maintained in accordance with the applicable building code.

D. Delete Sections 2203.3.1 through 2203.3.2, including Table 2203.3.1.2, and change Section 2203.3.3 to read:

2203.3.3 Cleanouts. Openings in enclosed equipment and conveyors shall be maintained to allow access to all parts of the equipment and conveyors to permit inspection, cleaning, maintenance, and the effective use of portable fire extinguishers or hose streams.

E. Change Sections 2203.4, 2203.4.1, 2203.4.2 (Items 1 through 4 remain), and 2203.4.3.1 to read:

2203.4 Sources of ignition. Sources of ignition shall be controlled in accordance with this section and the applicable building code.

2203.4.1 Classified electrical. Classified electrical equipment shall be maintained in accordance with the applicable NFPA 70. Electrical motors and electrical components of the equipment shall not be operated in the dust-laden airstream unless listed for locations in accordance with the applicable building code.

2203.4.2 Static electricity. Bonding and grounding required by the applicable building code in the following locations to minimize accumulation of static electric charge shall be maintained.

2203.4.3.1 Signs. Conspicuous signs with the following warning, required by the applicable building code to be posted in the vicinity of combustible dust-producing areas or in the vicinity of combustible dust use, shall be maintained:

NO WELDING. THE USE OF WELDING OR CUTTING EQUIPMENT IN OR NEAR THIS AREA IS DANGEROUS BECAUSE OF FIRE AND EXPLOSION HAZARDS. WELDING AND CUTTING SHALL BE DONE ONLY UNDER THE SUPERVISION OF THE PERSON IN CHARGE.

F. Change Sections 2203.4.4 and 2203.4.7 to read:

2203.4.4 Hot surfaces and hot equipment. Unless otherwise required or allowed by the applicable building code, in areas where a dust explosion hazard or dust flash fire hazard exists, the temperature (in degrees Celsius) of external surfaces shall be maintained below 80% of the lower of the dust-surface ignition temperature or the dust-cloud ignition temperature for worst case dusts. External surfaces shall include:

1. Compressors.

2. Steam, water, or process piping.

3. Ducts.

4. Conveyors.

5. Process equipment.

Where steam pipes or hot surfaces occur in dust-producing or dust-handling areas, accumulation of dust on the surfaces shall be minimized by an approved method. Exception: Drying apparatus listed for the intended use and installed in accordance with the manufacturer's instructions.

2203.4.7 Spark-producing devices. Portable spark-producing devices shall not be operated within 20 feet (6096 mm) of areas requiring classified electrical unless separated by a permanent partition or approved in accordance with the applicable building code. The clear distance required by the applicable building code between spark-producing devices and areas requiring classified electrical shall be maintained.

G. Change Sections 2203.4.9, 2203.4.9.1, 2203.4.9.3, and 2203.4.9.5 to read:

2203.4.9 Open flames and fuel-fired equipment. Open flames and fuel-fired equipment shall be in accordance with this section and the applicable building code. 2203.4.9.1 Release of airborne combustible dust. Unless otherwise required by the applicable building code, production, maintenance, or repair activities that have the potential to release or force combustible dust to become airborne shall not be conducted within 35 feet (11 m) of an open flame or pilot flame.

2203.4.9.3 Equipment listing. Fuel-fired process equipment listed for its intended use in accordance with the applicable building code shall be operated and maintained in accordance with the manufacturer's instructions and the applicable building code.

2203.4.9.5 Sources of combustion air. Sources of combustion air ducted directly from the building exterior or from an unclassified location for heating units located in Class II electrically classified locations shall be maintained in accordance with the applicable building code.

H. Delete Section 2204 in its entirety.

13VAC5-52-280. IFC Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages.

A. The following changes shall be made to Section 2301, General:

1. Change Section 2301.1 to read:

2301.1 Scope. The operation and maintenance of automotive motor fuel-dispensing facilities, marine motor fuel-dispensing facilities, fleet vehicle motor fuel-dispensing facilities, aircraft motor-vehicle fuel-dispensing facilities, and repair garages shall be in accordance with this chapter. Such operations shall include both those that are accessible to the public and private operations.

2. Change Section 2301.2 to read:

2301.2 Permits. Permits shall be required as set forth in Section 107.2.

3. Delete Section 2301.3.

4. Change Section 2301.4 to read:

2301.4 Indoor motor fuel-dispensing facilities. Motor fuel-dispensing facilities located inside buildings shall be maintained in accordance with NFPA 30A and the applicable building code.

5. Change Section 2301.5 to read:

2301.5 Electrical. Electrical wiring and equipment shall be suitable for the locations in which it is installed in accordance with the applicable building code and shall be maintained in accordance with Section 605, the applicable provisions of NFPA 30A, and NFPA 70.

6. Change Section 2301.6 to read:

2301.6 Heat-producing appliances. Heat-producing appliances shall be suitable for the locations in which they are located and shall comply with the applicable provisions of NFPA 30A and the applicable building code.

B. The following changes shall be made to Section 2303, Location of Dispensing Devices:

1. Change Section 2303.1 to read:

2303.1 Dispensing operations. Dispensing operations shall be maintained in accordance with the following unless otherwise approved in accordance with the applicable building code. In no case should any of these provisions require demolition or relocation of existing equipment when approved in accordance with the applicable building code:

1. 10 feet (3048 mm) or more from lot lines.

2. 10 feet (3048 mm) or more from buildings having combustible exterior wall surfaces or buildings having noncombustible exterior wall surfaces that are not part of a one-hour fire-resistance-rated assembly or buildings having combustible overhangs.

Exception: Canopies constructed in accordance with the applicable building code providing weather protection for the fuel islands.

3. Such that all portions of the vehicle being fueled will be on the premises of the motor fuel-dispensing facility.

4. Such that the nozzle, when the hose is fully extended, will not reach within five feet (1524 mm) of building openings.

5. 20 feet (6096 mm) or more from fixed sources of ignition.

2. Change Section 2303.2 and delete Section 2303.2.1.

Section 2303.2 to read:

2303.2 Emergency disconnect switches. An approved, clearly identified, and readily accessible emergency disconnect switch shall be maintained at an approved location in accordance with the applicable building code to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. Such devices shall be distinctly labeled: EMERGENCY FUEL SHUTOFF. Signs shall be provided in approved locations.

C. The following changes shall be made to Section 2304, Dispensing Operations:

1. Change Section 2304.2.2 to read:

2304.2.2 Emergency controls. Emergency disconnect switches shall be maintained in accordance with Section 2303.2.

2. Change Section 2304.3.2 to read:

2304.3.2 Dispensers. Dispensing devices shall be maintained in accordance with Section 2306.7. Dispensing devices operated by the insertion of coins or currency shall not be used unless approved in accordance with the applicable building code.

3. Change Section 2304.3.3 to read:

2304.3.3 Emergency controls. Emergency disconnect switches shall be maintained in accordance with Section 2303.2. Emergency controls shall be of a type that is only manually resettable.

4. Change Section 2304.3.5 to read:

2304.3.5 Emergency procedures. An approved emergency procedures sign, in addition to the signs required by Section 2305.6, shall be posted and maintained in a conspicuous location and shall read:

IN CASE OF FIRE SPILL OR RELEASE

1. USE EMERGENCY PUMP SHUTOFF

2. REPORT THE ACCIDENT!

FIRE DEPARTMENT TELEPHONE NO._____

FACILITY ADDRESS:_____

D. The following changes shall be made to Section 2305, Operational Requirements:

1. Change Section 2305.2.4 to read:

2305.2.4 Emergency shutoff valves. Automatic emergency shutoff valves shall be checked not less often than once each year by manually tripping the hold-open linkage.

2. Change Section 2305.2.5 to read:

2305.2.5 Leak detectors. Leak detection devices shall be checked and tested not less often than annually in accordance with the manufacturer's specifications to ensure proper installation and operation.

3. Change Section 2305.4 to read:

2305.4 Sources of ignition. Smoking and open flames shall be prohibited within 20 feet (6096 mm) of a fuel dispensing device. The engines of vehicles being fueled

shall be shut off during fueling. Electrical equipment shall be in accordance with NFPA 70.

E. The following changes shall be made to Section 2306, Flammable and Combustible Liquid Motor Fuel-Dispensing Facilities:

1. Change Section 2306.1 to read:

2306.1 General. Operation and maintenance of flammable and combustible liquid motor fuel-dispensing facilities shall be in accordance with Chapter 57, Sections 2306.2 through 2306.6.3, and other applicable provisions of this code.

2. Change Sections 2306.2.1, 2306.2.1.1, and 2306.2.1.2 to read:

2306.2.1 Underground tanks. Underground tanks for the storage of Class I, Class II, and Class IIIA liquid fuels shall comply with Chapter 57. For tanks subject to Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580), see Section 5701.1.1.

2306.2.1.1 Inventory records for underground tanks. Accurate inventory records shall be maintained on underground fuel storage tanks for indication of possible leakage from tanks and piping. The records shall be kept at the premises or made available for inspection by the fire official within 24 hours of a written or verbal request and shall include records for each tank. Where there is more than one system consisting of tanks serving separate pumps or dispensers for a product, the inventory record shall be maintained separately for each tank system.

A consistent or accidental loss of product shall be immediately reported to the fire official.

2306.2.1.2 Release detection for State Water Control Board regulated underground tanks. Underground storage tank systems subject to the Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580) shall comply with the release detection requirements of 9VAC25-580-130.

3. Change Section 2306.2.2 to read:

2306.2.2 Aboveground tanks located inside buildings. Aboveground tanks for the storage of Class I, Class II, and Class IIIA liquid fuels are allowed to be located in buildings where permitted by the applicable building code. For tanks subject to Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91), see Section 5701.1.1.

4. Change Section 2306.2.3 to read:

2306.2.3 Aboveground tanks located outdoors, above grade. Aboveground tanks shall not be used for the storage of Class I, Class II, or Class III liquid motor fuels unless approved in accordance with the applicable building code. Tanks located at farms, construction projects, or rural areas shall comply with Section 5706.2. For tanks subject to Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91), see Section 5701.1.1.

5. Delete Table 2306.2.3.

6. Change Section 2306.2.4 to read:

2306.2.4 Aboveground tanks located in above-grade vaults or below-grade vaults. Aboveground tanks used for storage of Class I, Class II, or Class IIIA liquid motor fuels are allowed to be installed in vaults located above grade or below grade where permitted by the applicable building code. For tanks subject to Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91), see Section 5701.1.1.

7. Change Section 2306.2.4.1 to read:

2306.2.4.1 Tank capacity limits. The individual and aggregate capacity of tanks storing Class I and Class II liquids at an individual site shall be limited to the quantities allowed in the applicable building code.

8. Change Section 2306.2.4.2 to read:

2306.2.4.2 Fleet vehicle motor fuel-dispensing facilities. The individual capacity and aggregate capacity of tanks storing Class II and Class IIIA liquids at a fleet vehicle motor fuel-dispensing facility shall be limited to the quantities allowed in the applicable building code.

9. Change Section 2306.2.6 to read:

2306.2.6 Special enclosures. Special enclosures, including concrete vaults, shall be maintained and remain in accordance with the applicable building code. Tanks for liquid motor fuels are allowed to be operated in approved special enclosures where maintained in accordance with the following:

1. The special enclosure shall be maintained liquid tight and vapor tight.

2. The special enclosure shall not contain backfill.

3. Sides, top, and bottom of the special enclosure shall be maintained as reinforced concrete, with openings for inspection through the top only.

4. Tank connections shall be maintained as piped or closed such that neither vapors nor liquid can escape into the enclosed space between the special enclosure and any tanks inside the special enclosure.

5. Means shall be maintained whereby portable equipment can be employed to discharge to the outside any vapors that might accumulate inside the special enclosure should leakage occur.

6. The individual and aggregate capacity of tanks containing Class I, Class II, or Class IIIA liquids operated inside a special enclosure shall be maintained as approved in accordance with the applicable building code.

7. Unless otherwise approved, each tank within special enclosures shall maintain a clear space of not less than three feet (910 mm) to allow for maintenance and inspection.

10. Change Section 2306.5 to read:

2306.5 Secondary containment. Drainage control or diking for aboveground tanks shall be maintained in accordance with Chapter 57. Secondary containment systems shall be monitored either visually or automatically. Emergency venting for enclosed secondary containment systems shall be maintained and remain in accordance with the applicable building code.

Note: Drainage control and diking is not required for listed secondary containment tanks.

11. Change Section 2306.6 to read:

2306.6 Piping, valves, fittings, and ancillary equipment for use with flammable or combustible liquids. The design, fabrication, and assembly of piping, valves, fittings, and ancillary equipment shall be in accordance with the applicable building code. The testing and inspection of piping, valves, fittings, and ancillary equipment for use with flammable or combustible liquids shall be in accordance with Chapter 57 and Sections 2306.6.1 through 2306.6.3.

12. Change Section 2306.6.2 to read:

2306.6.2 Piping, valves, fittings, and ancillary equipment for aboveground tanks for Class I, Class II, and Class III liquids. Piping, valves, fittings, and ancillary equipment for aboveground tanks for storing Class I, Class II, and Class III liquids shall be maintained in accordance with this section and in accordance with the applicable building code.

13. Change Section 2306.6.2.1 to read:

2306.6.2.1 Tank openings. Tank openings for aboveground tanks shall be through the top only unless specifically approved in accordance with the applicable building code.

14. Change Section 2306.6.2.2 to read:

2306.6.2.2 Fill-pipe connections. Unless otherwise approved in accordance with the applicable building code, the fill pipe operation for aboveground tanks shall be provided with a means for making a direct connection to the tank vehicle's fuel-delivery hose so that the delivery of fuel is not exposed to the open air during the filling operation.

15. Change Section 2306.6.2.3 to read:

2306.6.2.3 Overfill protection. Overfill protection for aboveground flammable and combustible liquid storage tanks shall be maintained in accordance with Chapter 57 and the applicable building code.

16. Change Section 2306.6.2.4 to read:

2306.6.2.4 Siphon prevention. Antisiphon methods provided in the piping system to prevent flow of liquid by siphon action shall be maintained in accordance with the applicable building code.

17. Change Section 2306.6.2.5 to read:

2306.6.2.5 Emergency relief venting. Emergency relief venting for aboveground storage tanks, tank compartments, and enclosed secondary containment spaces shall be maintained in accordance with Chapter 57 and the applicable building code.

18. Change Section 2306.6.2.6 to read:

2306.6.2.6 Spill containers. A spill container having a capacity of not less than five gallons (19 L) shall be provided for each fill connection. For tanks with a top fill connection, spill containers shall be noncombustible and shall be fixed to the tank and equipped with a manual drain valve that drains into the primary tank unless specifically approved otherwise in accordance with the applicable building code. For tanks with a remote fill connection, a portable spill container is allowed.

19. Change Section 2306.6.3 to read:

2306.6.3 Piping, valves, fittings, and ancillary equipment for underground tanks. Piping, valves, fittings, and ancillary equipment for underground tanks shall be maintained in accordance with Chapter 57, the applicable provisions of NFPA 30A, and the applicable building code.

20. Change Section 2306.7 to read:

2306.7 Fuel-dispensing systems for flammable or combustible liquids. Fuel-dispensing systems for flammable or combustible liquid fuels shall be maintained in accordance with Sections 2306.7.1 through 2306.7.9.2.4 and the applicable building code. Alcohol-blended fuel-dispensing systems shall also be maintained in accordance with Section 2306.8.

21. Change Section 2306.7.1 to read:

2306.7.1 Listed equipment. Electrical equipment, dispensers, hose, nozzles, and submersible or subsurface pumps used in fuel dispensing systems shall be listed unless otherwise approved in accordance with the applicable building code.

22. Change Section 2306.7.2 to read:

2306.7.2 Fixed pumps required. Unless otherwise approved in accordance with the applicable building code, Class I and Class II liquids shall be transferred from tanks by means of fixed pumps that allow control of the flow and prevent leakage or accidental discharge.

23. Change Section 2306.7.3 to read:

2306.7.3 Mounting of dispensers. Unless otherwise approved in accordance with the applicable building code,

dispensing devices, except those installed on top of a protected aboveground tank that qualifies as vehicle-impact resistant, shall be maintained as protected against physical damage by a concrete island six inches (152 mm) or more in height or shall maintain protection in accordance with Section 312. Dispensing devices shall be maintained securely fastened to their mounting surface in accordance with the dispenser manufacturer's instructions. Unless otherwise approved, dispensing devices installed indoors shall be located in a position where they cannot be struck by an out-of-control vehicle descending a ramp or other slope in accordance with the applicable building code.

24. Change Section 2306.7.4 to read:

2306.7.4 Dispenser emergency shutoff valve. Unless otherwise approved in accordance with the applicable building code, an approved automatic emergency shutoff valve designed to close in the event of a fire or impact shall be maintained in the liquid supply line at the base of each dispenser supplied by a remote pump. Such valve shall be maintained in accordance with the applicable building code. Emergency shutoff valves shall be maintained in accordance with the manufacturer's instructions and tested at least yearly in accordance with Section 2305.2.4.

25. Change Section 2306.7.5 to read:

2306.7.5 Dispenser hose. Dispenser hoses shall be a maximum of 18 feet (5486 mm) in length unless otherwise approved in accordance with the applicable building code. Dispenser hoses shall be maintained as listed and approved. When not in use, hoses shall be reeled, racked, or otherwise protected from damage.

26. Change Section 2306.7.5.1 to read:

2306.7.5.1 Emergency breakaway devices. Unless otherwise approved in accordance with the applicable building code, dispenser hoses for Class I and Class II liquids shall be maintained with a listed emergency breakaway device designed to retain liquid on both sides of a breakaway point. Such devices shall be maintained in accordance with the manufacturer's instruction. Where hoses are attached to hose-retrieving mechanisms, the emergency breakaway device shall remain between the hose nozzle and point of attachment of the hose-retrieval mechanism to the hose.

27. Change Section 2306.7.6 to read:

2306.7.6 Fuel delivery nozzles. Unless specifically approved otherwise in accordance with the applicable building code, island-type dispensers used for dispensing Class I, Class II or Class III liquids shall be maintained with a listed automatic-closing-type nozzle valve with or without a latch-open device, and overhead-type dispensing units shall be maintained with a listed automatic-closing-type nozzle valve without a latch-open device.

Exception: A listed automatic-closing-type hose nozzle valve with latch-open device is allowed to be used on overhead-type dispensing units where the design of the system is such that the hose nozzle valve will close automatically in the event the valve is released from a fill opening or upon impact with a driveway.

28. Delete Section 2306.7.6.1.

29. Change Section 2306.7.7 to read:

2306.7.7 Remote pumping systems. Remote pumping systems for liquid fuels shall be maintained in accordance with Sections 2306.7.7.1 and 2306.7.7.2 and the applicable building code.

30. Change Section 2306.7.7.1 to read:

2306.7.7.1 Leak detection. Leak detection devices shall be maintained. Unless otherwise approved by the applicable building code, where remote pumps are used to supply fuel dispensers, each pump shall maintain a listed leak detection device on the discharge side that will detect a leak in the piping or dispensers and provide an indication of the leak. A leak detection device is not required if the piping from the pump discharge to under the dispenser is above ground and visible.

31. Change Section 2306.7.7.2 to read:

2306.7.7.2 Location. Remote pumps installed above grade, outside of buildings, shall remain in approved locations in accordance with the applicable building code. Dispensing operations shall not be less than 10 feet (3048 mm) from lines of adjoining property that can be built upon and not less than five feet (1524 mm) from any building opening. Pumps shall be maintained substantially anchored and protected against physical damage. In no case should any of these provisions require demolition or relocation of existing equipment approved in accordance with the applicable building code.

32. Change Section 2306.7.9 to read:

2306.7.9 Vapor-recovery and vapor-processing systems. Vapor-recovery and vapor-processing systems shall be maintained in accordance with Sections 2306.7.9.1.1 through 2306.7.9.2.4 and the applicable building code.

33. Change Section 2306.7.9.1 to read:

2306.7.9.1 Vapor-balance systems. Vapor-balance systems shall be maintained in accordance with Sections 2306.7.9.1.1 through 2306.7.9.1.5 and the applicable building code.

34. Change Section 2306.7.9.1.1 to read:

2306.7.9.1.1 Dispensing devices. Dispensing devices incorporating provisions for vapor recovery shall be listed and labeled, unless otherwise approved in accordance with

the applicable building code. Where dispensing devices are modified for vapor recovery, such modifications shall be approved in accordance with the applicable building code and a listing report by a nationally recognized testing laboratory made available to the fire official upon request. Means shall be maintained to shut down fuel dispensing in the event the vapor return line becomes blocked.

35. Change Section 2306.7.9.1.2 to read:

2306.7.9.1.2 Vapor-return line closeoff. An acceptable method, in accordance with the applicable building code, shall be maintained to close off the vapor return line from dispensers when the product is not being dispensed.

36. Change Section 2306.7.9.1.3 to read:

2306.7.9.1.3 Piping. Piping in vapor-balance systems shall be maintained in accordance with Sections 5703.6, 5704.2.9, and 5704.2.11. Unless otherwise approved in accordance with the applicable building code, vapor return piping shall be maintained in a manner that drains back to the tank, without sags or traps in which the liquid can become trapped. Where provided, condensate tanks shall be maintained so that they can be drained without opening.

37. Change Section 2306.7.9.1.4 to read:

2306.7.9.1.4 Flexible joints and shear joints. Flexible joints and shear joints shall be maintained in accordance with Section 5703.6.9. Unless otherwise approved in accordance with the applicable building code, shear joints shall remain rigidly mounted and connected by a union in the vapor return piping at the base of each dispensing device and shall remain mounted flush with the top of the surface on which the dispenser is mounted.

38. Change Section 2306.7.9.1.5 to read:

2306.7.9.1.5 Testing. Existing vapor return lines and vent piping shall be tested in accordance with Section 5703.6.3 when the fire official has reasonable cause to believe that a leak exists.

39. Change Section 2306.7.9.2 to read:

2306.7.9.2 Vapor-processing systems. Vapor-processing systems shall be maintained in accordance with Sections 2306.7.9.2.1 through 2306.7.9.2.4 and the applicable building code.

40. Change Section 2306.7.9.2.1 to read:

2306.7.9.2.1 Equipment. Unless otherwise approved in accordance with the applicable building code, equipment in vapor-processing systems, including hose nozzle valves, vapor pumps, flame arresters, fire checks or systems for prevention of flame propagation, controls, and vapor-processing equipment shall be individually maintained as listed for the intended use in a specified manner. Equipment for prevention of flame or propagation that has been tested and listed as suitable for the intended use in vapor processing systems that introduce air into the underground piping or storage tanks shall be maintained.

41. Change Section 2306.7.9.2.2 to read:

2306.7.9.2.2 Location. Unless otherwise approved in accordance with the applicable building code, vapor-processing equipment shall remain located at grade or above grade and vapor processing units shall be operated not less than 10 feet (3048 mm) from the nearest building or lot line of a property that can be built upon. Sources of ignition shall be located not less than 50 feet (15,240 mm) from fuel-transfer areas and not less than 18 inches (457 mm) above tank fill openings and tops of dispenser islands.

42. Change Section 2306.7.9.2.2.1 to read:

2306.7.9.2.2.1 Distance from dispensing devices. Unless otherwise approved in accordance with the applicable building code, vapor-processing equipment functioning during dispensing operations shall maintain a minimum of 20 feet (6096 mm) from dispensing devices.

43. Change Section 2306.7.9.2.2.2 to read:

2306.7.9.2.2.2 Physical protection. Physical protection for vapor-processing equipment shall be maintained in accordance with Section 312 or the applicable building code. Where approved protective enclosures are used, approved means shall be maintained to ventilate the volume within the enclosure to prevent pocketing of flammable vapors.

44. Delete Section 2306.7.9.2.2.3.

45. Change Section 2306.7.9.2.3 to read:

2306.7.9.2.3 Mounting. Unless otherwise approved in accordance with the applicable building code, vapor-processing units shall be maintained securely mounted on concrete, masonry, or structural steel supports on concrete or other noncombustible foundations. Vapor-recover and vapor-processing equipment is allowed to be operated on roofs where approved in accordance with the applicable building code.

46. Change Section 2306.7.9.2.4 to read:

2306.7.9.2.4 Piping. Piping in a mechanical-assist system shall be maintained in accordance with Section 5703.6 and the applicable building code.

47. Change Section 2306.8 to read:

2306.8 Alcohol-blended fuel-dispensing operations. Alcohol-blended fuel-dispensing systems shall be maintained in accordance with Section 2306.7, Sections 2306.8.1 through 2306.8.5, and the applicable building code.

48. Change Section 2306.8.2 to read:

2306.8.2 Compatibility. Dispensers shall only be used with the fuels for which they have been listed, which are

marked on the product in accordance with § 59.1-167.1 of the Code of Virginia. Field installed components, including hose assemblies, breakaway couplings, swivel connectors, and hose nozzle valves, shall be maintained in accordance with the listing and marking on the unit.

49. Change Section 2306.8.4 to read:

2306.8.4 Facility identification. Facilities dispensing alcohol-blended fuels shall be identified in accordance with § 59.1-167.1 of the Code of Virginia.

F. The following changes shall be made to Section 2307, Liquefied Petroleum Gas Motor Fuel-Dispensing Facilities:

1. Change Section 2307.1 to read:

2307.1 General. Operation and maintenance of motor fuel-dispensing facilities for liquefied petroleum gas (LP-gas) fuel shall be in accordance with this section and other applicable provisions of this code.

2. Change Section 2307.2 to read:

2307.2 Approvals. Unless otherwise approved in accordance with the applicable building code, storage vessels and equipment for the storage or dispensing of LP-gas shall be maintained as approved or listed in accordance with Sections 2307.2.1 and 2307.2.2 and the applicable building code.

3. Change Section 2307.2.1 to read:

2307.2.1 Approved equipment. Unless otherwise approved in accordance with the applicable building code, containers; pressure relief devices, including pressure relief valves; pressure regulators; and piping for LP-gas shall be approved in accordance with the applicable building code.

4. Change Section 2307.2.2 to read:

2307.2.2 Listed equipment. Unless specifically approved otherwise in accordance with the applicable building code, hoses, hose connections, vehicle fuel connections, dispensers, LP-gas pumps, and electrical equipment for LP-gas shall be listed in accordance with the applicable building code.

5. Change Section 2307.3 to read:

2307.3 Attendants. Motor fuel-dispensing operations for LP-gas shall be conducted by qualified attendants or in accordance with Section 2307.6 by persons trained in the proper handling of LP-gas.

6. Change Section 2307.4 to read:

2307.4 Location of dispensing operations and equipment. Unless specifically approved otherwise in accordance with the applicable building code, the point of transfer for LP-gas dispensing operations shall be 25 feet (7620 mm) or more from buildings having combustible exterior wall surfaces, buildings having noncombustible exterior wall surfaces that are not part of a one-hour fire-resistance-rated assembly, or buildings having combustible overhangs, lot lines of property that could be built on, public streets, or sidewalks and railroads and at least 10 feet (3048 mm) from driveways and buildings having noncombustible exterior wall surfaces that are part of a fire-resistance-rated assembly having a rating of one hour or more. In no case should any of these provisions require demolition or relocation of existing equipment approved in accordance with the applicable building code.

Exception: The point of transfer for LP-gas dispensing operations need not be separated from canopies that are constructed in accordance with the applicable building code and that provide weather protection for the dispensing equipment. LP-gas containers shall remain located in accordance with Chapter 61 and the applicable building code. LP-gas storage and dispensing equipment shall be operated outdoors and in accordance with Section 2306.7 unless otherwise approved in accordance with the applicable building code.

7. Change Section 2307.5 to read:

2307.5 Additional requirements for LP-gas dispensers and equipment. Unless specifically approved otherwise in accordance with the applicable building code, LP-gas dispensers and related equipment shall be maintained in accordance with the following provisions:

1. Pumps shall remain fixed in place and shall be maintained to allow control of the flow and to prevent leakage and accidental discharge.

2. Dispensing devices operated within 10 feet (3048 mm) of where vehicular traffic occurs shall be protected against physical damage by mounting on a concrete island six inches (152 mm) or more in height or shall be protected in accordance with Section 312.

3. Dispensing devices shall remain securely fastened to their mounting surface in accordance with the dispenser manufacturer's instructions.

8. Change Section 2307.6 to read:

2307.6 Maintenance of LP-gas dispensing devices and equipment. LP-gas dispensing systems shall be maintained and remain in accordance with the applicable building code. The operation of LP-gas dispensing systems shall be in accordance with Sections 2307.6.1 through 2307.6.3 and Chapter 61. LP-gas dispensers and dispensing stations shall be maintained in accordance with the manufacturer's specifications and their listing.

9. Change Section 2307.6.1 to read:

2307.6.1 Valves. Unless otherwise approved in accordance with the applicable building code, a manual shutoff valve and an excess flow-control check valve shall be maintained in the liquid line between the pump and the dispenser inlet where the dispensing device is installed at a remote location and is not part of a complete storage and

dispensing unit mounted on a common base; an excess flow-control check valve or an emergency shutoff valve shall be maintained in or on the dispenser at the point at which the dispenser hose is connected to the liquid piping; a differential backpressure valve shall be considered equivalent protection; and a listed shutoff valve shall be maintained at the discharge end of the transfer hose.

10. Change Section 2307.6.2 to read:

2307.6.2 Hoses. Unless otherwise approved in accordance with the applicable building code, hoses and piping for the dispensing of LP-gas shall maintain hydrostatic relief valves. Hose length for dispensing operations shall not exceed 18 feet (5486 mm). An approved method shall be maintained to protect the hose against mechanical damage.

11. Change Sections 2307.6.3 and 2307.6.4 to read:

2307.6.3 Emergency breakaway devices. Unless otherwise approved in accordance with the applicable building code, a listed emergency breakaway device to retain liquid on both sides of the breakaway point shall be maintained on dispensing hoses. Where hoses are attached to hose-retrieving mechanisms, the emergency breakaway device shall be maintained such that the breakaway device activates to protect the dispenser from being displaced.

2307.6.4 Vehicle impact protection. Where operated within 10 feet of vehicle traffic, LP-gas storage containers, pumps, and dispensers shall maintain protection in accordance with Section 2307.5, Item 2, unless otherwise approved in accordance with the applicable building code.

12. Change Section 2307.7 to read:

2307.7 Public fueling of motor vehicles. Self-service LP-gas dispensing systems, including key, code, and card lock dispensing systems, shall be limited to the filling of permanently mounted containers providing fuel to the LP-gas powered vehicle. The requirements for self-service LP-gas dispensing systems shall be in accordance with the following:

1. The arrangement and operation of the transfer of product into a vehicle shall be in accordance with this section and Chapter 61.

2. The system shall maintain an emergency shut-off switch located in accordance with the applicable building code.

3. The owner of the LP-gas motor fuel-dispensing facility or the owner's designee shall provide for the safe operation of the system and the training of users.

4. Unless otherwise approved in accordance with the applicable building code, the dispenser and hose-end valve shall release not more than 1/8 fluid ounce (4 cc) of liquid to the atmosphere upon breaking the connection with the fill valve on the vehicle.

5. Portable fire extinguishers shall be provided in accordance with Section 2305.5.

6. Warning signs shall be provided in accordance with Section 2305.6.

7. The area around the dispenser shall be maintained in accordance with Section 2305.7.

G. The following changes shall be made to Section 2308, Compressed Natural Gas Motor Fuel-Dispensing Facilities:

1. Change Sections 2308.1 through 2308.3.1 to read:

2308.1 General. Motor fuel-dispensing facilities for compressed natural gas (CNG) fuel shall be maintained and remain in accordance with the applicable building code. Such facilities shall be operated and maintained in accordance with this section and Chapter 53.

2308.2 Approvals. Unless otherwise approved in accordance with the applicable building code, storage vessels and equipment used for the storage, compression, or dispensing of CNG shall be approved or listed in accordance with Sections 2308.2.1 and 2308.2.2 and the applicable building code.

2308.2.1 Approved equipment. Containers, compressors, pressure relief devices (including pressure relief valves), and pressure regulators and piping used for CNG shall be approved.

2308.2.2 Listed equipment. Hoses, hose connections, dispensers, gas detection systems, and electrical equipment used for CNG shall be maintained in accordance with their listing. Vehicle-fueling connections shall be listed and labeled in accordance with the applicable building code.

2308.2.3 Residential fueling appliance (RFA). Residential fueling appliances shall be maintained in accordance with their listing, the manufacturer installation instructions, and the applicable building code. The natural gas capacity of RFAs shall not exceed that allowed by the applicable building code.

2308.2.4 Vehicle fueling appliance (VFA). Nonresidential fueling appliances shall be maintained in accordance with their listing, the manufacturer installation instructions, and the applicable building code. The natural gas capacity of VFAs shall not exceed that allowed by the applicable building code.

2308.3 Location of dispensing operations and equipment. Unless approved otherwise in accordance with the applicable building code and Chapter 53, compression, storage, and dispensing equipment shall be located above ground and outside.

2308.3.1 Location of operations on property. Unless otherwise approved in accordance with the applicable building code, compression, storage, and dispensing equipment not located in vaults complying with Chapter 53 shall be maintained and operated in accordance with Section 2303.1 and the following. In no case should any of these provisions require demolition or relocation of

existing equipment when approved in accordance with the applicable building code.

1. Not beneath power lines.

2. Ten feet (3048 mm) or more from the nearest building or lot line that could be built on, public street, sidewalk, or source of ignition.

Exception: Dispensing equipment need not be separated from canopies that are constructed in accordance with the applicable building code and that provide weather protection for the dispensing equipment.

3. 25 feet (7620 mm) or more from the nearest rail of any railroad track and 50 feet (15,240 mm) or more from the nearest rail of any railroad main track or any railroad or transit line where power for train propulsion is provided by an outside electrical source, such as third rail or overhead catenary.

4. 50 feet (15,240 mm) or more from the vertical plane below the nearest overhead wire of a trolley bus line.

2. Change Section 2308.5 to read:

2308.5 Pressure regulators. Unless otherwise approved in accordance with the applicable building code, pressure regulators shall be maintained so that their operation will not be affected by the elements (freezing rain, sleet, snow, or ice), mud, or debris. The protection is allowed to be an integral part of the regulator.

3. Change Section 2308.6 to read:

2308.6 Valves. Unless otherwise approved in accordance with the applicable building code, the remote, readily accessible manual shutoff valve shall be maintained.

4. Change Section 2308.7 to read:

2308.7 Emergency shutdown control. Emergency shutdown controls shall be maintained and remain within 75 feet (22,860 mm) of, but not less than 25 feet (7620 mm) from, dispensers as well as in the compressor area unless otherwise approved in accordance with the applicable building code. Where provided, and upon activation, the emergency shutdown system shall be maintained to automatically shut off the power supply to the compressor and close valves between the main gas supply and the compressor and between the storage containers and dispensers.

H. The following changes shall be made to Section 2309, Hydrogen Motor Fuel-Dispensing and Generation Facilities:

1. Change Section 2309.1 to read:

2309.1 General. Hydrogen motor fuel-dispensing facilities shall be maintained and remain in accordance with the applicable building code. Such facilities shall be operated and maintained in accordance with this section and Chapter 58. Where a fuel-dispensing facility includes a repair garage, the repair operation shall comply with Section 2311.

2. Change Section 2309.2 to read:

2309.2 Equipment. Unless otherwise approved in accordance with the applicable building code, equipment used for the generation, compression, storage, or dispensing of hydrogen shall be maintained or the specific application in accordance with Sections 2309.2.1 through 2309.2.3.

3. Change Section 2309.2.1 to read:

2309.2.1 Approved equipment. Unless otherwise approved in accordance with the applicable building code, cylinders, containers, and tanks; pressure relief devices, including pressure valves; hydrogen vaporizers; pressure regulators; and piping used for gaseous hydrogen systems shall be maintained in accordance with Chapters 53, 55, and 58.

4. Change Section 2309.2.2 to read:

2309.2.2 Listed or approved equipment. Unless otherwise approved in accordance with the applicable building code, hoses, hose connections, compressors, hydrogen generators, dispensers, detection systems, and electrical equipment used for hydrogen shall be maintained as listed and labeled or approved for use with hydrogen.

5. Change Section 2309.2.3 to read:

2309.2.3 Electrical equipment. Electrical installations shall be maintained and remain in accordance with the applicable building code. Portable or temporary electrical equipment shall be in accordance with NFPA 70.

6. Change Section 2309.3 to read:

2309.3 Location on property. Unless otherwise approved in accordance with the applicable building code, dispensing equipment operations shall remain located in accordance with the applicable building code and maintained in accordance with Section 2303.1 and Sections 2309.3.1 through 2309.3.2.

7. Change Section 2309.3.1.1 to read:

2309.3.1.1 Outdoors. Generation, compression, or storage equipment shall be allowed outdoors where maintained in accordance with Chapter 58 and NFPA 2 or the applicable building code.

8. Change Section 2309.3.1.2 to read:

2309.3.1.2 Indoors. Generation, compression, storage and dispensing equipment operations located in indoor rooms or other approved areas shall remain in accordance with the requirements of the applicable building code and the maintenance provisions of NFPA 2, including ventilation.

9. Change Section 2309.3.1.3 to read:

2309.3.1.3 Gaseous hydrogen storage. Unless otherwise approved in accordance with the applicable building code, storage of gaseous hydrogen shall be maintained in accordance with Chapters 53 and 58.

10. Change Section 2309.3.1.4 to read:

2309.3.1.4 Liquefied hydrogen storage. Unless otherwise approved in accordance with the applicable building code, storage of liquefied hydrogen shall be maintained in accordance with Chapters 55 and 58.

11. Change Section 2309.3.1.5 to read:

2309.3.1.5 Canopy tops. Unless otherwise approved in accordance with the applicable building code, gaseous hydrogen compression and storage equipment operations located on top of motor fuel-dispensing canopies shall be maintained in accordance with Sections 2309.3.1.5.1 through 2309.3.1.5.5, Chapters 53 and 58, and the applicable building code.

Note: Canopy methods and materials require special conditions that must be maintained in accordance with the applicable building code.

12. Delete Section 2309.3.1.5.1.

13. Change Section 2309.3.1.5.2 to read:

2309.3.1.5.2 Fire-extinguishing systems. Fire-extinguishing systems provided for fuel-dispensing areas under canopies shall be maintained in accordance with Chapter 9 and remain in accordance with the applicable building code.

14. Change Section 2309.3.1.5.3 to read:

2309.3.1.5.3 Emergency discharge. Where provided, operation of the fire-extinguishing system shall be maintained to activate an automatic emergency discharge system that will discharge the hydrogen gas from the equipment on the canopy top through the vent pipe system.

15. Change Section 2309.3.1.5.4 to read:

2309.3.1.5.4 Emergency shutdown control. Where provided, operation of the fire extinguishing system shall be maintained to activate the emergency shutdown control required to be maintained by Section 2309.5.3.

16. Delete Section 2309.3.2.

17. Change Section 2309.4.1 to read:

2309.4.1 Dispensing systems. Unless otherwise approved in accordance with the applicable building code, dispensing systems with an overpressure protection device shall be maintained set at 140% of the service pressure of the fueling nozzle it supplies.

18. Change Section 2309.5 to read:

2309.5 Safety precautions. Safety precautions at hydrogen motor fuel-dispensing and generation facilities shall be in accordance with Sections 2309.5.1 through 2309.5.3.1.

19. Change Section 2309.5.2 to read:

2309.5.2 Emergency shutoff valves. Unless otherwise approved in accordance with the applicable building code, a manual emergency shutoff valve to shut down the flow of gas from the hydrogen supply to the piping system shall be maintained.

20. Change Section 2309.5.3 to read:

2309.5.3 Emergency shutdown controls. Unless otherwise approved in accordance with the applicable building code, a remotely located, manually activated shutdown control shall be maintained in addition to the manual emergency shutoff valve referenced by Section 2309.5.2. This emergency shutdown control shall be maintained within 75 feet (22,860 mm) of, but not less than 25 feet (7620 mm) from, dispensers and hydrogen generators unless otherwise approved by the applicable building code.

21. Change Section 2309.5.3.1 to read:

2309.5.3.1 System requirements. Unless otherwise approved in accordance with the applicable building code, activation of the emergency shutdown control shall be maintained to automatically shut off the power supply to all hydrogen storage, compression, and dispensing equipment; shut off natural gas or other fuel supply to the hydrogen generator; and close valves between the main supply and the compressor and between the storage containers and dispensing equipment.

22. Change Section 2309.6 to read:

2309.6 Repairs, purging, defueling, and discharge. The purging, defueling, or discharge activities associated with hydrogen motor fuel supply systems and tanks shall be in accordance with Chapters 53 and 58 and NFPA 2.

Exception: The fuel supply piping from the fuel storage tank to the engine compartment on a motor vehicle or forklift.

I. The following changes shall be made to Section 2310, Marine Motor Fuel-Dispensing Facilities:

1. Change Section 2310.1 to read:

2310.1 General. Marine motor fuel-dispensing facilities shall be maintained and remain in accordance with the applicable building code and the maintenance provisions of NFPA 30A. The storage of Class I, Class II, or Class IIIA liquids at marine motor fuel-dispensing facilities shall be maintained in accordance with this chapter and Chapter 57.

2. Change Section 2310.2 to read:

2310.2 Storage and handling. The storage and handling of Class I, Class II, or Class IIIA liquids at marine motor fuel-dispensing facilities shall be maintained in accordance with Sections 2310.2.1 through 2310.2.3.

3. Change Section 2310.2.1 to read:

2310.2.1 Class I, Class II, or Class IIIA liquid storage. Unless otherwise approved in accordance with the

applicable building code, Class I, Class II, or Class IIIA liquids stored inside of buildings used for marine motor fuel-dispensing facilities shall be stored in approved containers or portable tanks. Storage of Class I liquids shall not exceed 10 gallons (38 L).

Exception: Storage in liquid storage rooms in accordance with the applicable building code.

4. Change Section 2310.2.2 to read:

2310.2.2 Class II or Class IIIA liquid storage and dispensing. Unless specifically approved otherwise in accordance with the applicable building code, Class II or Class IIIA liquids stored or dispensed inside of buildings used for marine motor fuel-dispensing facilities shall be stored in and dispensed from approved containers or portable tanks. Storage of Class II and Class IIIA liquids shall be maintained to not exceed 120 gallons (454 L).

5. Change Section 2310.2.3 to read:

2310.2.3 Heating equipment. Heating equipment installed in Class I, Class II, or Class IIIA liquid storage or dispensing areas shall comply with Section 2301.6.

6. Change Section 2310.3.3 to read:

2310.3.3 Hoses and nozzles. Unless otherwise approved in accordance with the applicable building code, dispensing of Class I, Class II, or Class IIIA liquids into the fuel tanks of marine craft shall be by means of an approved-type hose equipped with a listed automatic-closing nozzle without a latch-open device. Hoses used for dispensing or transferring Class I, Class II, or Class IIIA liquids, when not in use, shall be reeled, racked, or otherwise protected from mechanical damage.

7. Change Section 2310.3.5 to read:

2310.3.5 Liquefied petroleum gas. Liquefied petroleum gas cylinders shall not be filled at marine motor fuel-dispensing facilities unless approved. Approved storage facilities for LP-gas cylinders shall be provided. See also Section 2307.

8. Change Section 2310.6 to read:

2310.6 Fire protection. Fire protection features for marine motor fuel-dispensing facilities shall be maintained in accordance with Sections 2310.6.1 through 2310.6.4 and remain in accordance with the applicable building code.

J. The following changes shall be made to Section 2311, Repair Garages:

1. Change Section 2311.1 to read:

2311.1 General. Operation and maintenance of repair garages shall be in accordance with this section and other applicable provisions of this code. Repair garages for vehicles that use more than one type of fuel shall comply with the applicable provisions of this section for each type of fuel used. Where a repair garage includes a motor fuel-dispensing facility, the fuel-dispensing operation shall comply with the requirements of this chapter for motor fuel-dispensing facilities.

2. Change Section 2311.2 to read:

2311.2 Storage and use of flammable and combustible liquids. The storage and use of flammable and combustible liquids in repair garages shall be maintained in accordance with Chapter 57 and Sections 2311.2.1 through 2311.2.4 and remain in accordance with the applicable building code.

3. Change Section 2311.2.3 to read:

2311.2.3 Drainage and disposal of liquids and oil soaked waste. Contents of oil separators, traps, and floor drainage systems shall be collected at sufficiently frequent intervals and removed from the premises to prevent oil from being carried into the sewers.

4. Change Section 2311.3.1 to read:

2311.3.1 Equipment. Appliances and equipment installed in a repair garage shall be maintained in accordance with Chapter 6, the applicable building code, and the maintenance provisions of NFPA 70.

5. Change Section 2311.4 to read:

2311.4 Below-grade areas. Pits and below-grade work areas in repair garages shall comply with Sections 2311.4.1 through 2311.4.3.

6. Delete Section 2311.4.1.

7. Change Section 2311.4.2 to read:

2311.4.2 Means of egress. Means of egress for pits and below-grade work areas shall be maintained in accordance with Chapter 10 and in accordance with the applicable building code.

8. Change Section 2311.4.3 to read:

2311.4.3 Ventilation. Where Class I liquids or LP-gas are stored or used within a building having a basement or pit wherein flammable vapors could accumulate, the basement or pit mechanical ventilation shall be maintained in accordance with the applicable building code to prevent the accumulation of flammable vapors.

9. Change Section 2311.8 and Sections 2311.8.2 through 2311.8.8 and delete Section 2311.8.6.

Section 2311.8 and Sections 2311.8.2 through 2311.8.8 to read:

2311.8 Repair garages for vehicles fueled by lighter-than-air fuels. The room, motor vehicle repair booth, or motor vehicle repair space containing repair garage activities for the conversion or repair of vehicles that use CNG, LNG, hydrogen, or other lighter-than-air motor fuels shall be in accordance with the applicable building code and Sections 2311.8 through 2311.8.11 in addition to the other

requirements of Section 2311. Repair garages for the repair of vehicles that use hydrogen fuel shall be in accordance with this code, the applicable building code, and NFPA 2.

Exceptions:

1. Repair garages where work is conducted only on vehicles that have been defueled and the vehicle's systems purged with nitrogen gas and where standard operating procedures to document and maintain the fueling status throughout repair operations are approved.

2. Repair garages where work is not performed on the fuel system and is limited to exchange of parts and maintenance not requiring open flame or welding on the CNG-fueled, LNG-fueled, hydrogen-fueled, or other lighter-than-air-fueled motor vehicle.

3. Repair garages for hydrogen-fueled vehicles where work is not performed on the hydrogen storage tank and is limited to the exchange of parts and maintenance not requiring open flame or welding on the hydrogen-fueled vehicle. During the work, the entire hydrogen fuel system shall contain less than 200 cubic feet (5.6 m^3) of hydrogen.

4. Repair garages for natural-gas-fueled vehicles where work is not being performed on the fuel storage tank and is limited to the exchange of parts and maintenance not requiring open flame or welding on the natural-gas-fueled vehicle. During the work, the natural gas in the vehicle fuel tank shall contain a pressure of not more than 250 psi at 70°F (1724 kPa at 21°C).

2311.8.2 Repair garages used for the repair of hydrogen-fueled vehicles. Repair garages used for the repair of hydrogen-fueled vehicles are required to be provided with an approved exhaust ventilation system in accordance with the applicable building code and maintained in accordance with Chapter 6 of NFPA 2.

2311.8.3 Motor vehicle repair rooms. Motor vehicle repair rooms shall maintain fire-resistance-rated separation from adjacent areas in accordance with Chapter 7 and the applicable building code.

2311.8.4 Motor vehicle repair booths. The maintenance and operation of motor vehicle repair booths shall be in accordance with Sections 2311.8.4.1 through 2311.8.4.4.

2311.8.4.1 Construction. Motor vehicle repair booths shall be maintained with approved materials in accordance with the applicable building code. Structural sections of motor vehicle repair booths shall remain sealed in an approved manner.

2311.8.4.2 Surfaces. The interior surfaces of motor vehicle repair booths shall be maintained to permit the free passage of exhaust air from all parts of the interior.

2311.8.4.3 Means of egress. Means of egress shall be maintained in accordance with Chapter 10 and the applicable building code.

NOTE: Means of egress doors from premanufactured motor vehicle repair booths shall be in accordance with manufacturer's specifications.

2311.8.4.4 Clear space. Unless otherwise approved by the applicable building code, motor vehicle repair booths shall be maintained so that all parts of the booth provide ready access for cleaning. A clear area not less than three feet (914 mm) wide shall be maintained on all sides of the motor vehicle repair booth. This clear area shall be kept free of any storage or combustible construction.

Exceptions:

1. This requirement shall not prohibit locating a motor vehicle repair booth closer than three feet (914 mm) to or directly against an interior partition, wall, or floor and ceiling assembly that has a fire-resistance rating of not less than one hour in accordance with the applicable building code, provided that the motor vehicle repair booth can be adequately maintained and cleaned.

2. This requirement shall not prohibit locating a motor vehicle repair booth closer than three feet (914 mm) to an exterior wall or a roof assembly, provided that the wall or roof is maintained of noncombustible material in accordance with the applicable building code and the motor vehicle repair booth can be adequately maintained and cleaned.

2311.8.5 Motor vehicle repair spaces. Where such spaces are not separately enclosed, noncombustible spray curtains shall be maintained and used to restrict the spread of flammable gases in accordance with the applicable building code.

2311.8.7 Fire extinguishers. Portable fire extinguishers complying with Section 906 shall be provided and maintained for motor vehicle repair rooms, motor vehicle repair booths, or motor vehicle repair spaces.

2311.8.8 Ventilation. Exhaust ventilation system. Where required by the applicable building code, repair garages used for the repair of CNG, LNG, or other lighter-than-air motor fuels other than hydrogen shall be maintained and operated with an approved mechanical ventilation system. The mechanical exhaust ventilation system shall be in accordance with the applicable building code and Sections 2311.8.8.1 and 2311.8.8.2.

Where approved by the applicable building code, natural ventilation shall be permitted in lieu of mechanical exhaust ventilation.

10. Delete Section 2311.8.8.1.

11. Change Section 2311.8.8.2 to read:

2311.8.8.2 Operation. Where required by the applicable building code, the mechanical exhaust ventilation system shall operate continuously.

Exceptions:

1. Mechanical exhaust ventilation systems that are interlocked with a gas detection system designed in accordance with Sections 2311.8.9 through 2311.8.9.2.

2. Mechanical exhaust ventilation systems in repair garages that are used only for repair of vehicles fueled by liquid fuels or odorized gases, such as CNG, where the ventilation system is electrically interlocked with the lighting circuit.

12. Change Sections 2311.8.9, 2311.8.9.1, and 2311.8.9.2 to read:

2311.8.9 Gas detection system. Where required by the applicable building code, repair garages used for repair of vehicles fueled by nonodorized gases, including hydrogen and nonodorized liquefied natural gas (LNG) the gas detection system shall be maintained. Where lubrication or chassis service pits are provided in garages used for repairing nonodorized LNG-fueled vehicles, gas sensors shall be maintained and operated in such pits.

2311.8.9.1 System activation. Required systems shall be maintained and operated as approved to result in all of the following if required by the applicable building code:

1. Initiation of local audible and visual alarms in approved locations.

2. Deactivation of heating systems located in the repair garage.

3. Activation of the mechanical exhaust ventilation system where the ventilation system is interlocked with gas detection.

2311.8.9.2 Failure of the gas detection system. Unless otherwise permitted by the applicable building code, failure of the gas detection system shall automatically deactivate the heating system, activate the mechanical exhaust ventilation system where the system is interlocked with the gas detection system, and cause a trouble signal to sound in an approved location.

13. Change Sections 2311.8.10 and 2311.8.11 to read:

2311.8.10 Classified electrical area. Classified electrical areas within 18 inches (450 mm) of a ceiling shall be maintained in accordance with the applicable building code and free of electrical hazards.

2311.8.11 Defueling equipment required at vehicle maintenance and repair facilities. Facilities for repairing or replacing hydrogen fuel tanks on hydrogen-fueled vehicles shall have equipment to defuel vehicle storage tanks. Where work must be performed on a vehicle's fuel storage tank for the purpose of maintenance, repair, or cylinder certification, defueling and purging shall be conducted in accordance with Section 2309.6 and NFPA 2.

13VAC5-52-290. IFC Chapter 24 Flammable Finishes.

A. The following change shall be made to Section 2401, General:

Change Section 2401.3 to read:

2401.3 Permits. Permits shall be required as set forth in Section 107.2.

B. The following changes shall be made to Section 2403, Protection of Operations:

1. Change Section 2403.2.1 to read:

2403.2.1 Electrical wiring and equipment. Electrical wiring and equipment shall be maintained in accordance with this chapter, the applicable building code, the applicable provisions of NFPA 70, and Chapter 6.

2. Change Section 2403.2.1.1 to read:

2403.2.1.1 Flammable vapor areas. Electrical wiring and equipment in flammable vapor areas shall be of an explosion proof type approved for use in such hazardous locations as classified by the applicable building code and shall be maintained in accordance with the applicable provisions of NFPA 70 and Chapter 6.

3. Change Section 2403.2.1.2 to read:

2403.2.1.2 Areas subject to deposits of residues. Electrical equipment, flammable vapor areas, or drying operations that are subject to splashing or dripping of liquids shall be specifically approved for locations containing deposits of readily ignitable residue and explosive vapors.

Exceptions:

1. The provision shall not apply to wiring in rigid conduit, threaded boxes, or fittings not containing taps, splices, or terminal connections.

2. This provision shall not apply to electrostatic equipment allowed by Section 2407.

In resin application areas, electrical wiring and equipment that is subject to deposits of combustible residues shall be listed for such exposure and shall be installed as required for hazardous (classified) locations. Electrical wiring and equipment not subject to deposits of combustible residues shall be installed as required for ordinary hazard locations.

4. Change Section 2403.2.1.3 to read:

2403.2.1.3 Areas adjacent to spray booths. Unless otherwise approved by the applicable building code, electrical wiring and equipment located outside of, but within three feet (915 mm) horizontally and three feet (915 mm) vertically of, openings in a spray booth or a spray room shall be maintained in accordance with the applicable building code.

5. Change Section 2403.2.5 to read:

2403.2.5 Grounding. Metal parts of spray booths, exhaust ducts, and piping systems conveying Class I or Class II liquids shall be electrically grounded in accordance with NFPA 70. Metallic parts located in resin application areas, including exhaust ducts, ventilation fans, spray

application equipment, workpieces, and piping, shall be electrically grounded.

C. The following changes shall be made to Section 2404, Spray Finishing:

1. Change Section 2404.1 to read:

2404.1 General. The application of flammable or combustible liquids by means of spray apparatus in continuous or intermittent processes shall be in accordance with the requirements of Sections 2403 and 2404.

2. Change Section 2404.2 to read:

2404.2 Location of spray-finishing operations. Unless otherwise approved by the applicable building code, spray finishing operations shall not be conducted in buildings used for Group A, E, I, or R occupancies except where approved in accordance with the applicable building code. In other occupancies, spray-finishing operations shall be conducted in a spray room, spray booth, or spraying space approved for such use where required by the applicable building code.

Exceptions:

1. Automobile undercoating spray operations and spray-on automotive lining operations conducted in areas with approved natural or mechanical ventilation shall be exempt from the provisions of Section 2404 when approved and where utilizing Class IIIA or Class IIIB combustible liquids.

2. In buildings other than Group A, E, I, or R occupancies, approved limited spraying space in accordance with Section 2404.9.

3. Resin application areas used for manufacturing of reinforced plastics complying with Section 2409 shall not be required to be located in a spray room, spray booth, or spraying space.

3. Change Section 2404.3 to read:

2404.3 Design and construction. Design and construction of spray rooms, spray booths, and spray spaces shall be in accordance with the applicable building code. These areas shall be maintained in accordance with Sections 2404.3 through 2404.3.3.

4. Change Section 2404.3.1 to read:

2404.3.1 Spray rooms. Spray rooms shall be maintained in accordance with this section and remain in accordance with the applicable building code.

5. Change Section 2404.3.2 to read:

2404.3.2 Floor. Combustible floor construction in spray rooms shall be covered by approved, noncombustible, nonsparking material, except where combustible coverings, including thin paper or plastic and strippable coatings, are utilized over noncombustible materials to facilitate cleaning operations in spray rooms.

6. Change Section 2404.3.3 to read:

2404.3.3 Spray booths. The design and construction of spray booths shall be in accordance with the applicable building code and maintained in accordance with Sections 2404.3.3.1 through 2403.3.6 and Sections 2404.4 through 2404.8 and the applicable sections of NFPA 33.

7. Delete Section 2404.3.3.1.

8. Change Section 2404.3.3.2 to read:

2404.3.3.2 Surfaces. The interior surfaces of spray booths shall be smooth, shall be maintained so as to permit the free passage of exhaust air from all parts of the interior and to facilitate washing and cleaning, and shall be maintained to confine residues within the booth. Aluminum shall not be used unless approved by the applicable building code.

9. Change Section 2404.3.3.3 to read:

2404.3.3.3 Floor covering. Combustible floor construction in spray booths shall be covered by approved, noncombustible, nonsparking material, except where combustible coverings, including thin paper or plastic and strippable coatings, are utilized over noncombustible materials to facilitate cleaning operations in spray booths

10. Change Section 2404.3.3.4 to read:

2404.3.3.4 Means of egress. Means of egress shall be maintained in accordance with the applicable building code and Chapter 10.

11. Change Section 2404.3.3.5 to read:

2404.3.3.5 Clear space. Spray booths shall be maintained so that all parts of the booth are readily accessible for cleaning. Unless otherwise approved by the applicable building code, a clear space of not less than three feet (914 mm) shall be maintained on all sides of the spray booth. This clear space shall be kept free of any storage or combustible construction. If approved in accordance with the applicable building code, the following exceptions may apply:

1. This requirement shall not prohibit locating a spray booth closer than three feet (914 mm) to or directly against an interior partition, wall, or floor and ceiling assembly that has a fire-resistance rating of not less than one hour, provided the spray booth can be adequately maintained and cleaned.

2. This requirement shall not prohibit locating a spray booth closer than three feet (914 mm) to an exterior wall or a roof assembly, provided the wall or roof is constructed of noncombustible material and the spray booth can be adequately maintained and cleaned.

12. Delete Section 2404.3.3.6.

13. Change Section 2404.3.4 to read:

2404.3.4 Spraying spaces. The design and construction of spray booths shall be in accordance with the applicable building code and maintained in accordance with Section 2404.3.3.1 and Sections 2404.4 through 2404.8.

14. Change Section 2404.3.4.1 to read:

2404.3.4.1 Floor covering. Combustible floor construction in spraying spaces shall be covered by approved, noncombustible, nonsparking material, except where combustible coverings, such as thin paper or plastic and strippable coatings, are utilized over noncombustible materials to facilitate cleaning operations in spraying spaces.

15. Change Section 2404.4 to read:

2404.4 Fire protection. Unless otherwise permitted by the applicable building code, spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system complying with the requirements of the applicable building code and maintained in accordance with Chapter 9.

16. Change Section 2404.6.2.1 to read:

2404.6.2.1 Glass panels. Panels for luminaires or for observation shall maintain seals to confine vapors, mists, residues, dusts, and deposits to the flammable vapor area. Panels for luminaires shall be separated from the luminaire to prevent the surface temperature of the panel from exceeding 200°F (93°C).

17. Change Section 2404.6.2.2 to read:

2404.6.2.2 Exterior luminaires. Luminaires attached to the walls or ceilings of a flammable vapor area, but outside of any classified area and separated from the flammable vapor areas by vapor-tight glass panels, shall be suitable for use in ordinary hazard locations. Such luminaires shall be serviced from outside the flammable vapor areas.

18. Change Section 2404.6.2.3 to read:

2404.6.2.3 Integral luminaires. Luminaires that are an integral part of the walls or ceiling of a flammable vapor area are allowed to be separated from the flammable vapor area by glass panels that are an integral part of the luminaire. Such luminaires shall be used only if listed for use in hazardous locations in accordance with the applicable building code and also shall be suitable for accumulations of deposits of combustible residues. Such luminaires are allowed to be serviced from inside the flammable vapor area.

19. Change Section 2404.7 to read:

2404.7 Ventilation. Mechanical ventilation of flammable vapor areas shall be maintained and operated in accordance with the applicable building code.

20. Change Section 2404.7.1 to read:

2404.7.1 Operation. Where provided, mechanical ventilation shall be kept in operation at all times while spraying operations are being conducted and for a sufficient time thereafter to allow vapors from drying coated articles and finishing material residue to be exhausted.

21. Change Section 2404.7.2 to read:

2404.7.2 Recirculation. Air exhausted from spraying operations shall not be recirculated unless otherwise permitted by the applicable building code.

22. Change Section 2404.7.3 to read:

2404.7.3 Air velocity. The required air velocity for ventilation systems shall be maintained in accordance with the applicable building code.

23. Change Section 2404.7.3.1 to read:

2404.7.3.1 Open-face or open-front spray booth. For spray application operations conducted in an open-face or open-front spray booth, the ventilation system air velocity shall be maintained in accordance with the requirements of the applicable building code.

24. Change Section 2404.7.3.2 to read:

2404.7.3.2 Enclosed spray booth or spray room with openings for product conveyance. For spray application operations conducted in an enclosed spray booth or spray room with openings for product conveyance, the ventilation system shall be maintained in accordance with the applicable building code.

25. Delete Section 2404.7.5.

26. Change Section 2404.7.6 to read:

2404.7.6 Termination point. Unless otherwise permitted by the applicable building code, the termination point for exhaust ducts discharging to the atmosphere shall be maintained to be not less than the distances listed as follows:

1. Ducts conveying explosive or flammable vapors, fumes, or dusts: 30 feet (9144 mm) from the lot line; 10 feet (3048 mm) from openings into the building; six feet (1829 mm) from exterior walls and roofs; 30 feet (9144 mm) from combustible walls or openings into the building that are in the direction of the exhaust discharge; and 10 feet (3048 mm) above adjoining grade.

2. Other product-conveying outlets: 10 feet (3048 mm) from the lot line; three feet (914 mm) from exterior walls and roofs; 10 feet (3048 mm) from openings into the building; and 10 feet (3048 mm) above adjoining grade.

Termination locations at less than these distances shall be evaluated by the building official for compliance in accordance with the applicable building code.

27. Change Section 2404.7.7 to read:

2404.7.7 Fan motors and belts. Electric motors driving exhaust fans shall not be placed inside booths or ducts unless approved. Fan rotating elements shall be nonferrous or nonsparking or the casing shall consist of or be lined with such material. Belts shall not enter the duct or booth unless the belt and pulley within the duct are tightly enclosed.

28. Change Section 2404.7.8 to read:

2404.7.8 Filters. Unless otherwise approved by the applicable building code, air intake filters that are part of a wall or ceiling assembly shall be listed as Class I or Class II in accordance with UL 900. Exhaust filters shall be provided where required by the applicable building code.

29. Change Section 2404.7.8.1 to read:

2404.7.8.1 Supports. Supports and holders for filters shall be maintained as noncombustible materials unless otherwise approved by the applicable building code.

30. Change Section 2404.7.8.3 to read:

2404.7.8.3 Maintaining air velocity. Where provided, visible gauges, audible alarms, or pressure-activated devices shall be maintained to indicate or ensure that the required air velocity is maintained.

31. Change Section 2404.7.8.4 to read:

2404.7.8.4 Filter rolls. Unless otherwise permitted by the applicable building code, where spray booths are equipped with a filter roll that is automatically advanced, the filter roll shall be arranged to shut down the spraying operation if the filter roll fails to advance automatically.

32. Change Section 2404.7.8.7 to read:

2404.7.8.7 Waterwash spray booths. Waterwash spray booths shall be maintained so as to prevent excessive accumulation of deposits in ducts and residue at duct outlets. Such booths shall be maintained so that air and overspray are drawn through a continuously flowing water curtain before entering an exhaust duct to the building exterior.

33. Change Section 2404.8 to read:

2404.8 Interlocks. Interlocks for spray application finishes shall be maintained fully operational in accordance with the applicable building code.

34. Change Section 2404.8.1 to read:

2404.8.1 Automated spray application operations. Unless otherwise permitted by the applicable building code, where protecting automated spray application operations, automatic fire-extinguishing systems with an approved interlock feature shall maintain that feature so that, upon discharge of the system, automatic fire-extinguishing system will automatically stop the spraying operations and workpiece conveyors into and out of the flammable vapor areas. Where the building is equipped with a fire alarm system, discharge of the automatic fire-extinguishing system shall be maintained to activate the building alarm notification appliances in accordance with the applicable building code.

35. Change Section 2404.8.1.1 to read:

2404.8.1.1 Alarm station. Where required, a manual fire alarm and emergency system shutdown station shall be maintained accessible and fully operational in accordance with the applicable building code.

36. Delete Section 2404.8.1.2.

37. Change Section 2404.8.2 to read:

2404.8.2 Ventilation interlock prohibited. Unless otherwise permitted by the applicable building code, air makeup and flammable vapor area exhaust systems shall not be interlocked with the fire alarm system and shall remain in operation during a fire alarm condition.

Exception: Where the applicable building code requires such ventilation to be discontinued and dampers closed.

38. Change Section 2404.9.3 to read:

2404.9.3 Ventilation. Positive mechanical ventilation providing a minimum of six complete air changes per hour shall be maintained in accordance with the applicable building code.

39. Change Section 2404.9.4 to read:

2404.9.4 Electrical wiring. Electrical wiring within 10 feet (3048 mm) of the floor and 20 feet (6096 mm) horizontally of the limited spraying space shall be designed for Class I, Division 2 locations in accordance with the applicable building code.

D. The following changes shall be made to Section 2405, Dipping Operations:

1. Change Section 2405.2 to read:

2405.2 Location of dip-tank operations. Where required by the applicable building code, dip-tank operations conducted in buildings used for Group A, I, or R occupancies shall be located in a room designed for that purpose, equipped with an approved automatic sprinkler system, and separated vertically and horizontally from other areas in accordance with the applicable building code.

2. Change Section 2405.3 to read:

2405.3 Construction of dip tanks. Dip tanks shall be constructed in accordance with Sections 2405.3.1 through 2405.3.4.3 and NFPA 34. Dip tanks, including drain boards, shall be constructed of noncombustible material and their supports shall be of heavy metal, reinforced concrete, or masonry unless otherwise approved by the applicable building code.

3. Change Section 2405.3.1 to read:

2405.3.1 Overflow. To operate dip tanks greater than 150 gallons (568 L) in capacity or 10 square feet (0.93 m^2) in liquid surface area, they shall be equipped with a trapped overflow pipe leading to an approved location outside the building in accordance with the building code.

4. Change Section 2405.3.2 to read:

2405.3.2 Bottom drains. Unless otherwise permitted by the applicable building code, dip tanks greater than 500 gallons (1893 L) in liquid capacity shall only be operated with bottom drains that are arranged to automatically and manually drain the tank quickly in the event of a fire unless the viscosity of the liquid at normal atmospheric temperature makes this impractical. Manual operation shall continue to be from a safe, accessible location. Such drains shall be trapped and discharged to a closed, vented salvage tank or to an approved outside location in accordance with the applicable building code.

Exception: Dip tanks containing Class IIIB combustible liquids, where the liquids are not heated above room temperature and the process area is protected by automatic sprinklers.

5. Change Section 2405.4 to read:

2405.4 Fire protection. Dip tank operations shall be protected with a fire protection system in accordance with the applicable building code and maintained in accordance with Chapter 9.

6. Change Section 2405.4.1 to read:

2405.4.1 Fixed fire-extinguishing equipment. Where required by the applicable building code, an automatic fire-extinguishing system or a dip tank cover shall be maintained.

7. Change Section 2405.4.1.1 to read:

2405.4.1.1 Fire-extinguishing system. Unless otherwise permitted by the applicable building code, an approved automatic fire-extinguishing system shall be provided for dip tanks with a 150 gallon (568 L) or more capacity or 10 square feet (0.93 m^2) or larger liquid surface area.

8. Change Section 2405.7 to read:

2405.7 Ventilation of flammable vapor areas. Mechanical ventilation in flammable vapor areas shall be operated and maintained to prevent the dangerous accumulation of vapors. Where required by the applicable building code, the failure of any ventilating fan shall automatically stop the dipping conveyor system.

9. Change Section 2405.9.1 to read:

2405.9.1 Location. Unless otherwise required by the applicable building code, tanks shall be located as far as practical from furnaces and shall not be located on or near combustible floors.

10. Change Section 2405.9.2 to read:

2405.9.2 Hoods. Unless otherwise required by the applicable building code, tanks shall be operated only with a noncombustible hood and vent or other approved venting means, terminating outside of the structure to serve as a vent in case of a fire. Such vent ducts shall be treated as flues, and proper clearances shall be maintained from combustible materials.

11. Change Section 2405.9.3 to read:

2405.9.3 Alarms. Tanks shall be operated with a high-temperature-limit switch maintained to sound an alarm when the temperature of the quenching medium reaches 50°F (10°C) below the flash point or other approved level as required by the applicable building code.

12. Change Section 2405.9.4 to read:

2405.9.4 Fire protection. Unless otherwise permitted by the applicable building code, hardening and tempering tanks greater than 500 gallons (1893 L) in capacity or 25 square feet (2.3 m^2) in liquid surface area shall be protected by an approved automatic fire-extinguishing system maintained in accordance with Chapter 9.

13. Change Section 2405.10.1 to read:

2405.10.1 Paint supply. Unless otherwise permitted by the applicable building code, paint operations shall be supplied by a gravity tank not exceeding 10 gallons (38 L) in capacity or by direct low-pressure pumps arranged to shut down automatically in case of a fire by means of approved heat-actuated devices in accordance with the applicable building code.

14. Change Section 2405.11 to read:

2405.11 Roll-coating operations. Roll-coating operations shall comply with Section 2405.10. In roll-coating operations utilizing flammable or combustible liquids, sparks from static electricity shall be prevented by electrically bonding and grounding all metallic rotating and other parts of machinery and equipment and by the installation of static collectors or by maintaining a conductive atmosphere such as a high relative humidity.

E. The following changes shall be made to Section 2406, Powder Coating:

1. Change Section 2406.2 to read:

2406.2 Location. Powder coating operations shall be conducted in enclosed powder coating rooms, enclosed powder coating facilities that are ventilated, or ventilated spray booths and in accordance with applicable building code.

2. Change Section 2406.3 to read:

2406.3 Construction of powder coating rooms and booths. The design and construction of powder coating rooms shall be in accordance with the applicable building code.

Spray booths shall be constructed in accordance with Section 2404.3.3.

Exception: Listed spray-booth assemblies that are constructed of other materials shall be allowed.

3. Change Section 2406.4 to read:

2406.4 Fire protection. Where required by the applicable building code, automatic fire-extinguishing systems shall be maintained in accordance with Chapter 9.

4. Delete Section 2406.4.1.

5. Change Section 2406.6.4 to read:

2406.6.4 Grounding and bonding. Precautions shall be taken to minimize the possibility of ignition by static electrical sparks through static bonding and grounding of powder transport, application, and recovery equipment where possible.

6. Change Section 2406.7 to read:

2406.7 Ventilation. Exhaust ventilation shall be sufficient to maintain the atmosphere below one-half the minimum explosive concentration for the material being applied. Nondeposited, air-suspended powders shall be removed through exhaust ducts to the powder recovery system.

F. The following changes shall be made to Section 2407, Electrostatic Apparatus:

1. Change Section 2407.2 to read:

2407.2 Location and clear space. A space of at least twice the sparking distance shall be maintained between goods being painted or deteared and electrodes, electrostatic atomizing heads, or conductors. A sign stating the sparking distance shall be conspicuously posted near the assembly.

Exception: Portable electrostatic paint-spraying apparatus listed for use in Class I, Division 1 locations.

2. Change Section 2407.3 to read:

2407.3 Construction of equipment. Electrodes and electrostatic atomizing heads shall be maintained in accordance with the applicable building code. Portable electrostatic paint-spraying apparatus shall be listed for use in Class I, Division 1 locations.

3. Change Section 2407.3.1 to read:

2407.3.1 Barriers. Booths, fencing, railings, or guards shall be maintained about the equipment so that either by their location, character, or both, isolation of the process is maintained from plant storage and personnel. Railings, fencing, and guards shall be of conductive material, adequately grounded, and at least five feet (1524 mm) from processing equipment in accordance with the applicable building code.

Exception: Portable electrostatic paint-spraying apparatus listed for use in Class I, Division 1 locations.

4. Change Section 2407.4 to read:

2407.4 Fire protection. Approved automatic fire-extinguishing systems shall be maintained in accordance with Chapter 9.

5. Change Section 2407.4.1 to read:

2407.4.1 Protection for automated liquid electrostatic spray application equipment. Where required by the applicable building code, automated liquid electrostatic spray application equipment shall maintain an approved supervised flame detection apparatus that shall, in the event of ignition, react to the presence of flame and shall accomplish all of the following if required by the applicable building code:

1. Activation of a local alarm in the vicinity of the spraying operation and activation of the building alarm system if such a system is provided.

2. Shutting down of the coating material delivery system.

3. Termination of all spray application operations.

4. Stopping of conveyors into and out of the flammable vapor areas.

5. Disconnection of power to the high-voltage elements in the flammable vapor areas and disconnection of power to the system.

6. Change Section 2407.7 to read:

2407.7 Ventilation. Ventilation provided for flammable vapor areas shall be maintained in accordance with the applicable building code.

7. Change Section 2407.8 to read:

2407.8 Emergency shutdown. Where emergency shutdowns are required by the applicable building code, such devices shall be maintained with automatic controls operating without time delay to disconnect the power supply to the high-voltage transformer and signal the operator under any of the following conditions unless otherwise permitted by the applicable building code:

1. Stoppage of ventilating fans or failure of ventilating equipment from any cause.

2. Stoppage of the conveyor carrying articles past the high-voltage grid.

3. Occurrence of a ground or an imminent ground at any point of the high-voltage system.

4. Reduction of clearance below that required in Section 2407.2.

8. Change Section 2407.9 to read:

2407.9 Ventilation interlock. Unless otherwise permitted by the applicable building code, hand electrostatic equipment shall be maintained as interlocked with the ventilation system for the spraying area so that the equipment cannot be operated unless the ventilating system is in operation.

G. The following change shall be made to Section 2408, Organic Peroxides and Dual-Component Coatings:

Change Section 2408.2 to read:

2408.2 Use of organic peroxide coatings. Unless otherwise permitted by the applicable building code, spraying operations involving the use of organic peroxides and other dual-component coatings shall be conducted in approved, sprinklered spray booths complying with the applicable building code.

H. The following changes shall be made to Section 2409, Indoor Manufacturing of Reinforced Plastics:

1. Change Section 2409.3 to read:

2409.3 Fire protection. Where required by the applicable building code, automatic fire-extinguishing systems shall be maintained in accordance with Chapter 9.

2. Change Section 2409.6 to read:

2409.6 Ventilation. Mechanical ventilation shall be maintained throughout resin application areas in accordance with 2404.7 and the applicable building code. The ventilation rate shall be adequate to maintain the concentration of flammable vapors in the resin application area at or below 25% of the LFL unless otherwise permitted by the applicable building code.

Exception: Mechanical ventilation is not required for buildings that have 75% of the perimeter unenclosed.

3. Change Section 2409.6.1 to read:

2409.6.1 Local ventilation. Local ventilation shall be provided inside of work-pieces where personnel will be under or inside of the work-piece.

13VAC5-52-300. IFC Chapter 25 Fruit and Crop Ripening.

A. The following changes shall be made to Section 2501, General:

1. Change Section 2501.2 to read:

2501.2 Permits. Permits shall be required as set forth in Section 107.2.

2. Change Section 2501.3 to read:

2501.3 Ethylene generators. Approved ethylene generators shall be operated and maintained in accordance with Section 2506 and the applicable building code.

B. The following change shall be made to Section 2503, Ethylene Gas:

Change Section 2503.2 to read:

2503.2 Dispensing. Valves controlling discharge of ethylene shall be maintained to limit the concentration of gas in accordance with this chapter and the applicable building code.

C. The following changes shall be made to Section 2504, Sources of Ignition:

1. Change Section 2504.1 to read:

2504.1 Ignition prevention. Sources of ignition shall be controlled or protected in accordance with this section and Chapter 3.

2. Change Section 2504.2 to read:

2504.2 Electrical wiring and equipment. Electrical wiring and equipment, including luminaires, shall be classified and maintained in accordance with Chapter 6, the applicable building code, and the maintenance provisions of NFPA 70.

3. Change Section 2504.3 to read:

2504.3 Static electricity. Bonding and grounding provided for permanent containers, piping, and equipment shall be maintained in accordance with the applicable building code. Portable containers, piping, and equipment shall be bonded and grounded in accordance with Chapter 57.

4. Change Section 2504.5 to read:

2504.5 Heating. Heating shall be maintained in accordance with Chapter 6 and the applicable building code.

D. The following changes shall be made to Section 2506, Ethylene Generators:

1. Change Section 2506.1 to read:

2506.1 Ethylene generators. Ethylene generators shall be listed and labeled by an approved testing laboratory, approved, and used only in approved rooms in accordance with the ethylene generator manufacturer's instructions. The listing evaluation shall include documentation that the concentration of ethylene gas does not exceed 25% of the lower explosive limit (LEL).

2. Change Section 2506.2 to read:

2506.2 Ethylene generator rooms. Portable ethylene generators shall be used in rooms having a volume of not less than 1,000 cubic feet (28 m^3). Rooms shall have air circulation to ensure even distribution of ethylene gas and shall be free from sparks, open flames, or other ignition sources.

13VAC5-52-310. IFC Chapter 26 Fumigation and Insecticidal Fogging.

Change Section 2601.2 to read:

2601.2 Permits. Permits shall be required as set forth in Section 107.2.

13VAC5-52-320. IFC Chapter 27 Semiconductor Fabrication Facilities.

A. Change Section 2701.1 to read:

2701.1 Scope. The operation and maintenance of semiconductor fabrication facilities and comparable

research and development areas classified as Group H-5 shall comply with this chapter The use, storage, and handling of hazardous materials in Group H-5 shall comply with this chapter, other applicable provisions of this code, and requirements of the applicable building code.

B. Delete Section 2701.4.

C. Change Section 2701.5 to read:

2701.5 Permits. Permits shall be required as set forth in Section 107.2.

D. Change Section 2703.1.3 to read:

2703.1.3 Signals. Unless otherwise permitted by the applicable building code, the emergency control station shall receive signals from emergency equipment and alarm and detection systems. Such emergency equipment and alarm and detections systems include the following where such equipment or systems are required by the applicable building code:

1. Automatic sprinkler system alarm and monitoring systems.

2. Manual fire alarm systems.

3. Emergency alarm systems.

4. Continuous gas detection systems.

5. Smoke detection systems.

6. Emergency power system.

7. Automatic detection and alarm systems for pyrophoric liquids and Class 3 water-reactive liquids required by Section 2705.2.3.4.

8. Exhaust ventilation flow alarm devices for pyrophoric liquids and Class 3 water-reactive liquids cabinet exhaust ventilation systems required by Section 2705.2.3.4.

E. Change Section 2703.2.2 to read:

2703.2.2 General requirements. In addition to the requirements in Section 2703.2, systems, equipment, and other processes shall also comply with Section 5003.2, other applicable provisions of this code, and the applicable building code.

F. Delete Sections 2703.3 and 2703.3.1.

G. Change Sections 2703.3.2 through 2703.3.8 to read:

2703.3.2 Pass-throughs in exit access corridors. Pass-throughs in exit access corridors shall comply with the applicable building code.

2703.3.3 Liquid storage rooms. Liquid storage rooms shall comply with Chapter 57 and the applicable building code.

2703.3.4 HPM rooms. Hazardous production materials (HPM) rooms shall comply with the applicable building code.

2703.3.5 Gas cabinets. Gas cabinets shall comply with Section 5003.8.6.

2703.3.6 Exhausted enclosures. Exhausted enclosures shall be maintained in accordance with Section 5003.8.5 and remain in accordance with the applicable building code.

2703.3.7 Gas rooms. Gas rooms shall be maintained in accordance with Section 5003.8.4 and remain in accordance with the applicable building code.

2703.3.8 Service corridors. Service corridors shall comply with Section 2705.3 and remain in accordance with the applicable building code.

H. Change Sections 2703.7 and 2703.7.1 to read:

2703.7 Electrical wiring and equipment. Electrical wiring and equipment in HPM facilities shall comply with Sections 2703.7.1 through 2703.7.3.

2703.7.1 Fabrication areas. Electrical wiring and equipment in fabrication areas shall be maintained in accordance with the applicable provisions of NFPA 70 and remain in accordance with the applicable building code.

I. Add Section 2703.7.2 to read:

2703.7.2 Workstations. Electrical equipment and devices within five feet (1524 mm) of workstations in which flammable or pyrophoric gases or flammable liquids are used shall be maintained in accordance with the applicable provisions of NFPA 70 for hazardous locations. Workstations shall not be energized without adequate exhaust ventilation in accordance with Section 2703.14.

Exception: Not required when the air removal from the workstation or dilution will prevent the accumulation of flammable vapors and fumes on a continuous basis.

J. Change Section 2703.7.3 to read:

2703.7.3 Hazardous production material (HPM) rooms, gas rooms, and liquid storage rooms. Electrical wiring and equipment in HPM rooms, gas rooms, and liquid storage rooms shall be maintained in accordance with the applicable provisions of NFPA 70 and remain in accordance with the applicable building code.

K. Change Section 2703.10 to read:

2703.10 Automatic sprinkler system. Where required by the applicable building code automatic sprinkler systems shall be maintained in accordance with Chapter 9.

L. Delete Sections 2703.10.1 and 2703.10.1.1.

M. Delete Sections 2703.10.2 through 2703.10.4.4.1.

N. Change Sections 2703.10.4.4.2 and 2703.10.4.4.3 to read:

2703.10.4.4.2 Control valve. Control valves provided for sprinklers installed in exhaust ducts shall be maintained in accordance with the applicable building code.

2703.10.4.4.3 Drainage. Drainage provided to remove sprinkler water discharged in exhaust ducts shall be maintained.

O. Delete Section 2703.10.4.4.4.

P. Change Sections 2703.10.5 through 2703.12 to read:

2703.10.5 Sprinkler alarms and supervision. Automatic sprinkler systems, associated electronic supervision, and alarms shall be maintained in accordance with Chapter 9. Where required by the applicable building code, automatic sprinkler system alarm and supervisory signals shall also remain transmitted to the emergency control station.

2703.11 Manual fire alarm system. Where provided, a manual fire alarm system shall be maintained in accordance with Chapter 9 and remain throughout buildings containing a Group H-5 occupancy in accordance with the applicable building code. Where required by the applicable building code, activation of the alarm system shall also be maintained to transmit a signal to the emergency control station.

2703.12 Emergency alarm system. Emergency alarm systems shall be maintained in accordance with Chapter 9 and remain in accordance with the applicable building code. Where required by the applicable building code, emergency alarm systems shall also remain transmitted to the emergency control station.

Q. Delete Sections 2703.12.1 and 2703.12.1.1.

R. Delete Sections 2703.12.1.2 and 2703.12.1.3.

S. Delete Sections 2703.12.2 and 2703.12.3.

T. Change Section 2703.13 to read:

2703.13 Continuous gas detection systems. Where required by the applicable building code, a continuous gas detection system shall be maintained for HPM gases. Such a system shall remain in accordance with the applicable building code where the physiological warning threshold level of the gas is at a higher level than the accepted permissible exposure limit (PEL) for the gas and for flammable gases.

U. Delete Section 2703.13.1 and add Section 2703.13.2.

2703.13.2 Gas detection system operation. Where required by the applicable building code, a continuous gas detection system shall be maintained capable of monitoring the room, area, or equipment in which the gas is located at or below all the following gas concentrations:

1. Immediately dangerous to life and health (IDLH) values when the monitoring point is within an exhausted enclosure, ventilated enclosure or gas cabinet.

2. Permissible exposure limit (PEL) levels when the monitoring point is in an area outside an exhausted enclosure, ventilated enclosure, or gas cabinet.

3. For flammable gases, the monitoring detection threshold level shall be vapor concentrations in excess of 25% of the lower flammable limit (LFL) when the monitoring is within or outside an exhausted enclosure, ventilated enclosure, or gas cabinet.

4. Except as noted in this section, monitoring for highly toxic and toxic gases shall also comply with Chapter 60.

V. Change Section 2703.14 to read:

2703.14 Exhaust ventilation systems for HPM. Exhaust ventilation systems and materials for exhaust ducts utilized for the exhaust of HPM shall be maintained and operated in accordance with this chapter and other applicable provisions of this code and remain in accordance with the applicable building code.

W. Delete Section 2703.14.2 and add Section 2703.14.1 to read:

2703.14.1 Operations and maintenance of HPM areas. Exhaust ventilation systems shall be maintained in the following locations in accordance with the requirements of this section and the applicable building code:

1. Fabrication areas: Exhaust ventilation for fabrication areas shall comply with the applicable building code.

2. Workstations: A ventilation system shall be maintained to capture and exhaust gases, fumes, and vapors at workstations.

3. Liquid storage rooms: Exhaust ventilation for liquid storage rooms shall comply with the applicable building code.

4. HPM rooms: Exhaust ventilation for HPM rooms shall comply with the applicable building code.

5. Gas cabinets: Exhaust ventilation for gas cabinets shall comply with Section 5003.8.6.2. The gas cabinet ventilation system is allowed to connect to a workstation ventilation system. Exhaust ventilation for gas cabinets containing highly toxic or toxic gases shall also comply with Chapter 60.

6. Exhausted enclosures: Exhaust ventilation for exhausted enclosures shall comply with Section 5003.8.5.2. Exhaust ventilation for exhausted enclosures containing highly toxic or toxic gases shall also comply with Chapter 60.

7. Gas rooms: Exhaust ventilation for gas rooms shall comply with Section 5003.8.4.2 and the applicable building code. Exhaust ventilation for gas rooms containing highly toxic or toxic gases shall also comply with Chapter 60.

8. Cabinets containing pyrophoric liquids or Class 3 water-reactive liquids: Exhaust ventilation for cabinets in fabrication areas containing pyrophoric liquids or Class 3 water-reactive liquids shall be as required in Section 2705.2.3.4.

X. Change Section 2703.15 to read:

2703.15 Emergency power system. Where required by the applicable building code, an emergency power system shall be maintained in accordance with Section 603.

Y. Change Section 2703.15.1 to read:

2703.15.1 Required electrical systems. Where provided or required by the applicable building code, emergency power shall be maintained for electrically operated equipment and connected control circuits, including the following systems in accordance with the applicable building code:

1. HPM exhaust ventilation systems.

2. HPM gas cabinet ventilation systems.

3. HPM exhausted enclosure ventilation systems.

4. HPM gas room ventilation systems.

5. HPM gas detection systems.

6. Emergency alarm systems.

7. Manual fire alarm systems.

8. Automatic sprinkler system monitoring and alarm systems.

9. Automatic alarm and detection systems for pyrophoric liquids and Class 3 water-reactive liquids required in Section 2705.2.3.4.

10. Flow alarm switches for pyrophoric liquids and Class 3 water-reactive liquids cabinet exhaust ventilation systems required in Section 2705.2.3.4.

11. Electrically operated systems required elsewhere in this code or in the applicable building code that are applicable to the use, storage, or handling of HPM.

Z. Change Sections 2703.15.2 through 2704.2.1 to read:

2703.15.2 Exhaust ventilation systems. Where permitted by the applicable building code exhaust ventilation systems are allowed to be maintained to operate at not less than one-half the normal fan speed on the emergency power system when it is demonstrated that the level of exhaust will maintain a safe atmosphere.

2703.16 Subatmospheric pressure gas systems. Subatmospheric pressure gas systems (SAGS) shall be maintained in accordance with the applicable provisions of NFPA 318 and the applicable building code.

2704.1 General. Storage of hazardous materials shall comply with Section 2703 and this section and other applicable provisions of this code.

2704.2.1 Location of HPM storage in fabrication areas. Storage of HPM in fabrication areas shall be maintained within approved or listed storage cabinets, gas cabinets, or exhausted enclosures or within a workstation as follows.

1. Flammable and combustible liquid storage cabinets shall comply with Section 5704.3.2.

2. Hazardous materials storage cabinets shall comply with Chapter 50.

3. Gas cabinets shall comply with Chapter 50. Gas cabinets for highly toxic or toxic gases shall also comply with Chapter 60.

4. Exhausted enclosures shall comply with Chapter 50. Exhausted enclosures for highly toxic or toxic gases shall also comply with Chapter 60.

5. Workstations shall comply with Section 2705.2.3.

AA. Change Section 2704.2.2.1 to read:

2704.2.2.1 Storage and use in fabrication areas. The maximum quantities of hazardous materials stored or used in a single fabrication area shall not exceed the quantities set forth in Table 2704.2.2.1 unless otherwise approved by the applicable building code.

BB. Change Section 2704.3.1 to read:

2704.3.1 HPM storage. The indoor storage of HPM in quantities greater than those listed in Sections 5003.1.1 and 5704.3.4 shall be approved by the building official and located in a room complying with the requirements of the applicable building code and this code for a liquid storage room, HPM room, or gas room as appropriate for the materials stored.

CC. Change Section 2705.1 to read:

2705.1 General. The use and handling of hazardous materials shall comply with this section, Section 2703, and other applicable provisions of this code to the extent that such requirements are operational in nature and do not affect how a building is constructed.

DD. Change Section 2705.2.3.2 to read:

2705.2.3.2 Protection of vessels. Vessels containing hazardous materials located in or connected to a workstation shall be protected as follows:

1. HPM: Vessels containing HPM shall be protected from physical damage and shall not project from the workstation.

2. Compressed gases: Protection for compressed gas vessels shall also comply with Section 5303.5.

3. Cryogenic fluids: Protection for cryogenic fluid vessels shall also comply with Section 5503.5.

EE. Change Section 2705.3.1 to read:

2705.3.1 Corridors and enclosures for stairways and ramps. Corridors and enclosures for exit stairways and ramps in new fabrication areas shall not contain HPM, except as permitted in corridors by Section 2705.3.2 and the applicable building code.

FF. Change Sections 2705.3.2.1 and 2705.3.3 to read:

2705.3.2.1 Existing fabrication area transportation. Where existing fabrication areas are not required by the applicable building code to utilize approved service corridors, HPM is allowed to be handled and transported in accordance with Section 5003.10.

2705.3.3 Service corridors. Where service corridors are required by the applicable building code and transportation of HPM from a liquid storage room, HPM room, or gas room or from the outside of a building to the perimeter wall of a fabrication area is necessary, such transport shall be through approved service corridors.

13VAC5-52-330. IFC Chapter 28 Lumber Yards and Agro-Industrial, Solid Biomass, and Woodworking Facilities.

A. Change Section 2801.2 to read:

2801.2 Permit. Permits shall be required as set forth in Section 107.2.

B. Change Sections 2803.1 through 2803.3 to read:

2803.1 Open yards. Open yards around structures required by the applicable building code shall be maintained. The space shall be maintained free of obstructions associated with the outdoor storage of the materials regulated by Chapter 28, which could interfere with the function of the open space, especially that of providing fire department access to the building.

2803.2 Dust control. Equipment or machinery located inside buildings that generates or emits combustible dust shall be maintained in accordance with Chapter 22 and the applicable building code. Equipment or systems that are used to collect, process, or convey combustible dusts provided with an approved explosion control system in accordance with the applicable building code shall be maintained in accordance with Chapter 9.

2803.2.1 Explosion venting. Where a dust explosion hazard exists in equipment rooms, buildings, or other enclosures, such areas shall be declared an unsafe condition in accordance with Section 110.1, and operations shall not be continued until the hazard is mitigated. Where explosion venting is provided it shall be maintained in accordance with Chapter 9 and the applicable building code.

2803.3 Waste removal. Sawmills, planing mills, and other woodworking plants shall maintain waste removal systems that collect and remove sawdust and shavings. Such systems shall be maintained in accordance with Chapter 22 and comply with the applicable building code.

Exception: Manual waste removal when approved.

C. Change Section 2803.4 to read:

2803.4 Electrical equipment. Electrical wiring and equipment shall be maintained in accordance with Chapter 6, the applicable building code, and the maintenance provisions of NFPA 70.

D. Change Section 2804.2 and delete Section 2804.2.1.

Section 2804.2 to read:

2804.2 Fire alarms. Where provided, fire alarm systems shall be maintained in accordance with Chapter 9.

E. Change Section 2804.4 to read:

2804.4 Automatic sprinkler systems. Automatic sprinkler systems shall be maintained in accordance with Chapter 9.

F. Change Section 2805.2 to read:

2805.2 Dryer protection. Dryers protected by an approved, automatic deluge water-spray suppression system shall be maintained in accordance with Chapter 9. Deluge heads shall be inspected quarterly for pitch buildup. Deluge heads shall be flushed during regular maintenance for functional operation.

G. Change Section 2807.2 to read:

2807.2 Size of piles. Piles shall not exceed 60 feet (18,288 mm) in height, 300 feet (91,440 mm) in width, and 500 feet (152 m) in length. Piles shall be separated from adjacent piles or other exposures by approved fire apparatus access roads.

Exception: The fire code official is authorized to allow the pile size to be increased where additional approved fire protection is provided in accordance with Chapter 9.

H. Change Section 2807.3 to read:

2807.3 Outdoor pile fire protection. Where conveyor tunnels and combustible enclosures pass under an outdoor pile, automatic sprinkler protection shall be provided. Automatic sprinkler protection shall be maintained in accordance with Chapter 9.

I. Change Section 2808.7 to read:

2808.7 Pile fire protection. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system. These systems shall be maintained in accordance with Chapter 9.

Note: Systems regulated by the USBC must comply with the applicable building code.

13VAC5-52-340. IFC Chapter 29 Manufacture of Organic Coatings.

A. Change Section 2901.2 to read:

2901.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 2903.1 to read:

2903.1 Building features. Unless approved by the applicable building code, manufacturing of organic coatings shall be done only in buildings that do not have pits or basements.

C. Change Section 2903.2 to read:

2903.2 Location. Unless approved by the applicable building code, organic coating manufacturing operations and operations incidental to or connected with organic coating manufacturing shall not be located in buildings having other occupancies.

D. Change Section 2903.4 to read:

2903.4 Fire protection systems. Fire protection systems shall be maintained, periodically inspected, and tested in accordance with Chapter 9.

E. Change Section 2903.10 to read:

2903.10 Drainage. Drainage facilities shall be maintained to direct flammable and combustible liquid leakage and fire protection water to an approved location away from the building, any other structure, any storage area, or adjoining premises.

F. Change Section 2903.11 to read:

2903.11 Alarm system. Alarm systems shall be maintained in accordance with Chapter 9.

G. Change Section 2904.1 to read:

2904.1 Wiring and equipment. Electrical wiring and equipment shall be maintained in accordance with Chapter 6, the applicable building code, and the maintenance provisions of NFPA 70.

H. Change Section 2904.3 to read:

2904.3 Bonding. Equipment, including tanks, machinery, and piping shall not be operated where an ignitable mixture is capable of being present unless bonded and connected to a ground in accordance with the applicable building code.

I. Change Section 2904.3.1 to read:

2904.3.1 Piping. Electrically isolated sections of metallic piping or equipment shall be maintained grounded or bonded to the other grounded portions of the system in accordance with the applicable building code.

J. Change Section 2904.4 to read:

2904.4 Ground. Metal framing of buildings shall be grounded in accordance with the applicable building code.

K. Change Section 2905.1 to read:

2905.1 Process location. Process operations shall be conducted in structures approved in accordance with the applicable building code.

L. Change Section 2905.4 to read:

2905.4 Explosion control. Explosion control shall be maintained in areas subject to potential deflagration hazards as indicated by the applicable building code. Explosion control shall be maintained in accordance with Section 911 and NFPA 35.

M. Change Section 2905.5 to read:

2905.5 Ventilation. Enclosed structures in which Class I liquids are processed or handled shall be ventilated to a safe location outside of the structure in accordance with the applicable building code.

N. Change Section 2906.1 to read:

2906.1 Mills. Mills operating with close clearances that process flammable and heat-sensitive materials, such as nitrocellulose, shall maintain operations in a detached building or in a noncombustible structure without other occupancies unless otherwise approved by the applicable building code. The amount of nitrocellulose or other flammable material brought into the area shall not be more than the amount required for a batch.

O. Change Section 2909.2 to read:

2909.2 Tank storage. Tank storage for flammable and combustible liquids located inside of structures shall be limited to storage areas at or above grade that are separated from the processing area in accordance with the applicable building code. Processing equipment containing flammable and combustible liquids and storage in quantities essential to the continuity of the operations shall not be prohibited in the processing area.

P. Change Section 2909.4 to read:

2909.4 Nitrocellulose storage. Nitrocellulose storage shall be located on a detached pad or in a separate structure or a room enclosed in accordance with the applicable building code. When nitrocellulose storage is present, the area shall not be utilized for any other use in accordance with the applicable building code. Electrical wiring and equipment in storage areas adjacent to process areas shall be maintained in accordance with Section 2904.2.

Q. Change Section 2909.6 to read:

2909.6 Finished products. Finished products that are flammable or combustible liquids shall be stored outside of

structures, in a separate structure, or in a room separated from the processing area where such storage is permitted under the applicable building code. The storage of finished products shall be in tanks or closed containers in accordance with Chapter 57.

13VAC5-52-350. IFC Chapter 30 Industrial Ovens.

A. Change Section 3001.1 to read:

3001.1 Scope. This chapter shall apply to the maintenance and operation of industrial ovens and furnaces. Industrial ovens and furnaces shall comply with the applicable maintenance provisions of NFPA 86, the applicable building code, and this chapter. The terms "ovens" and "furnaces" are used interchangeably in this chapter.

B. Change Section 3001.2 to read:

3001.2 Permits. Permits shall be required as set forth in Section 107.2.

C. Change Section 3003.1 to read:

3003.1 Ventilation. Ventilation or combustion air for industrial ovens or furnaces shall be maintained in accordance with the applicable building code.

D. Change Section 3003.4 to read:

3003.4 Temperatures. Unless otherwise approved by the applicable building code, roofs and floors of ovens shall maintain insulation and ventilation to prevent temperatures at combustible ceilings and floors from exceeding 160°F (71°C).

E. Change Section 3004.1 to read:

3004.1 Fuel-gas piping. Fuel-gas piping serving industrial ovens shall be maintained in accordance with this section and remain in accordance with the applicable building code.

F. Change Section 3004.2 to read:

3004.2 Shutoff valves. Manual fuel shutoff valves for industrial ovens or furnaces shall be maintained in accordance with the applicable building code.

G. Change Section 3004.2.1 to read:

3004.2.1 Fuel supply lines. Valves for fuel supply lines shall be located within six feet (1829 mm) of the appliance served.

Exception: When a valve located in the same general area as the appliance served has been approved in accordance with the applicable building code.

H. Change Section 3004.3 to read:

3004.3 Valve position. Manual fuel shutoff valves shall be maintained to visually indicate the open or closed position of the valve. Manual fuel shutoff valves shall not be equipped with removable handles or wrenches unless the handle or wrench can only be installed parallel with the fuel line when the valve is in the open position.

I. Change Sections 3005.1, 3006.1, and 3006.2 to read:

3005.1 Shut down. Interlocks shall be maintained for Class A ovens so that conveyors or sources of flammable or combustible materials shall shut down if either the exhaust or recirculation air supply fails.

3006.1 Required protection. Fire-extinguishing systems provided for Class A and Class B ovens that contain or are utilized for the processing of combustible materials shall be maintained in accordance with Chapter 9.

3006.2 Fixed fire-extinguishing systems. Fixed fire-extinguishing systems shall be maintained in accordance with Chapter 9 for Class C or Class D ovens to protect against such hazards as overheating, spillage of molten salts or metals, quench tanks, ignition of hydraulic oil, and escape of fuel.

13VAC5-52-360. IFC Chapter 31 Tents, Temporary Special Event Structures, and Other Membrane Structures.

A. The following change shall be made to Section 3101, General:

Change Section 3101.1 to read:

3101.1 Scope. Tents, temporary special event structures, and membrane structures shall comply with this chapter. The provisions of Section 3103 are applicable only to temporary tents and membrane structures. The provisions of Section 3104 are applicable to temporary and permanent tents and membrane structures.

B. The following changes shall be made to Section 3103, Temporary Tents and Membrane Structures:

1. Change Section 3103.1 to read:

3103.1 General. All temporary tents and membrane structures shall comply with this section.

2. Change Section 3103.2 to read:

3103.2 Approval required. Tents and membrane structures having an area in excess of 900 square feet (84 m^2) shall not be erected, operated, or maintained for any purpose without first obtaining a permit and approval from the fire code official in accordance with Table 107.2.

3. Add Section 3103.2.1 and delete Section 3103.3.1.

Section 3103.2.1 to read:

3103.2.1 Multiple tents. The aggregate area of multiple tents separated by less than 12 feet (3658 mm) shall not exceed 900 square feet unless approved in accordance with Section 3103.2.

4. Change Section 3103.4 to read:

3103.4 Permits. Permits shall be required as set forth in Section 107.2.

5. Change Sections 3103.9.1 through 3103.9.3 to read:

3103.9.1 Tents and membrane structures exceeding one story. Tents and membrane structures exceeding one story shall be designed and constructed to comply with the applicable building code.

3103.9.2 Tents and membrane structures greater than 7,500 square feet. Tents and membrane structures greater than 7,500 square feet shall be designed and constructed to comply with the applicable building code.

3103.9.3 Tents and membrane structures with an occupant load greater than 1,000. Tents and membrane structures with an occupant load greater than 1,000 shall be designed and constructed to comply with the applicable building code.

C. The following changes shall be made to Section 3104, Temporary and Permanent Tents and Membrane Structures:

1. Change Section 3104.1 to read:

3104.1 General. Tents and membrane structures, both temporary and permanent, shall be in accordance with this section. Permanent tents and membrane structures shall also comply with the applicable building code.

2. Change Section 3104.2 to read:

3104.2 Flame propagation performance treatment. Before a permit is granted, the owner or agent shall file a certificate executed by an approved testing laboratory certifying that the tents and membrane structures and their appurtenances; sidewalls, drops, and tarpaulins; floor coverings, bunting, and combustible decorative materials and effects, including sawdust where used on floors or passageways, are composed of material meeting the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701 or shall be treated with a flame retardant in an approved manner and meet the flame propagation performance criteria of Test Method 1 or Test Method 2, as appropriate, of NFPA 701, and that such flame propagation performance criteria are effective for the period specified by the permit.

3. Change Section 3104.4 to read:

3104.4 Certification. An affidavit or affirmation shall be submitted to the fire code official and a copy retained on the premises on which the tent or air-supported structure is located. The affidavit shall attest to all of the following information relative to the flame propagation performance criteria of the fabric:

1. Names and address of the owners of the tent or air-supported structure.

2. Date the fabric was last treated with flame-retardant solution.

3. Trade name or kind of chemical used in treatment.

4. Name of person or firm treating the material.

5. Name of testing agency and test standard by which the fabric was tested.

D. The following changes shall be made to Section 3105, Temporary Special Event Structures:

1. Change Section 3105.1 to read:

3105.1 General. Operation and maintenance of temporary stage canopies shall be in accordance with Section 3104, Sections 3105.2 through 3105.7, and ANSI E1.21.

2. Change Sections 3105.2 and 3105.3 to read:

3105.2 Approval. Temporary stage canopies in excess of 400 square feet (37 m^2) shall not be erected for any purpose without first obtaining approval and a permit from the building official.

3105.3 Permits. Permits shall be required as set forth in Section 107.2.

3. Change Section 3105.5 to read:

3105.5 Required documents. Documents shall be submitted to the building official where required by the USBC.

4. Change Sections 3105.6 through 3105.6.2 to read:

3105.6 Inspections. Inspections shall comply with Section 106 and Sections 3105.6.1 and 3105.6.2.

3105.6.1 Independent inspector. The owner of a temporary stage canopy shall employ a qualified, independent approved agency or individual to inspect the installation of a temporary stage canopy.

3105.6.2 Inspection report. The inspecting agency or individual shall furnish an inspection report to the building official and fire code official. The inspection report shall indicate that the temporary stage canopy was inspected and was or was not installed in accordance with the approved construction documents. Discrepancies shall be brought to the immediate attention of the installer for correction. Where any discrepancy is not corrected, the discrepancy shall be brought to the attention of the building official and fire code official and the designated responsible party.

5. Change Section 3105.7 to read:

3105.7 Means of egress. The means of egress for temporary stage canopies shall comply with Chapter 10 and the applicable building code.

6. Delete Section 3105.8.

7. Change Section 3106.2.2 to read:

3106.2.2 Permits. An operational permit shall be required as set forth in Section 107.2.

8. Change Section 3107.10 to read:

3107.10 Fire protection equipment. Fire hose lines, water supplies, and other auxiliary fire equipment shall be maintained at the site in such numbers and sizes as required by the fire code official.

9. Change Section 3107.11 to read:

3107.11 Occupant load factors. The occupant load allowed in an assembly structure or portion thereof erected for a period of 180 days or less shall be determined in accordance with Chapter 10 of the IFC.

10. Change Section 3107.12.1 to read:

3107.12.1 Installation. Heating or cooking equipment tanks, piping, hoses, fittings, valves, tubing, and other related components in assembly structures or portions thereof erected for 180 days or fewer shall be operated and maintained in accordance with manufacturer specifications and other provisions of this code.

11. Change Section 3107.12.2 to read:

3107.12.2 Venting. Gas, liquid, and solid fuel-burning equipment designed to be vented shall be vented to the outside air as specified by the applicable building code and shall be approved. Such vents shall be equipped with approved spark arresters where required. Where vents or flues are used, all portions of the tent or membrane structure shall be not less than 12 inches (305 mm) from the flue or vent.

12. Change Section 3107.12.5 to read:

3107.12.5 Cooking tents. Cooking tents shall be separated from other tents or membrane structures by not less than 20 feet (6096 mm).

13. Change Section 3107.13.1 to read:

3107.13.1 General. LP-gas equipment such as tanks, piping, hoses, fittings, valves, tubing, and other related components shall be approved and in accordance with Chapter 61 and with the applicable building code.

14. Change Section 3107.13.2 and add Table 3107.13.2 to read:

3107.13.2 Location of containers. LP-gas containers and tanks shall be located outside in accordance with Table 3107.13.2. Pressure relief devices shall be pointed away from the tent or membrane structure.

TABLE 3107.13.2 LOCATION OF LP-GAS CONTAINERS

LP-Gas Container Capacity (water gallons)	Minimum Separation between LP-Gas Containers and Buildings, Public Ways,[g] or Lot Lines of Adjoining Property that Can be Built on		Minimum Separation between LP-Gas Containers[b, c] (feet)
	Mounded or underground LP-gas containers[a] (feet)	Aboveground LP-gas containers[b] (feet)	
Less than 125[c,d]	10	5[e]	None
125 to 250	10	10	None
251 to 500	10	10	3
501 to 2,000	10	25[e,f]	3
2,001 to 30,000	50	50	5
30,001 to 70,000	50	75	(0.25 of sum of diameters of adjacent LP-gas containers)
70,001 to 90,000	50	100	
90,001 to 120,000	50	125	

For SI: one foot = 304.8 mm, one gallon = 3.785 L.

a. Minimum distance for underground LP-gas containers shall be measured from the pressure relief device and the filling or liquid-level gauge vent connection at the container, except that all parts of an underground LP-gas container shall be not less than 10 feet from a building or lot line of adjoining property that can be built on.

b. For other than installations in which the overhanging structure is 50 feet or more above the relief-valve discharge outlet. In applying the distance between buildings and ASME LP-gas containers with a water capacity of 125 gallons or more, not less than 50% of this horizontal distance shall also apply to all portions of the building that project more than five feet from the building wall and that are higher than the relief valve discharge outlet. This horizontal distance shall be measured from a point determined by projecting the outside edge of such overhanging structure vertically downward to grade or other level on which the LP-gas container is installed. Distances to the building wall shall be not less than those prescribed in this table.

c. Where underground multicontainer installations are composed of individual LP-gas containers having a water capacity of 125 gallons or more, such containers shall be installed so as to provide access at their ends or sides to facilitate working with cranes or hoists.

d. At a consumer site, if the aggregate water capacity of a multiple-container installation, comprised of individual LP-gas containers having a water capacity of less than 125 gallons, is 500 gallons or more, the minimum distance shall comply with the appropriate portion of this table, applying the aggregate capacity rather than the capacity per LP-gas container. If more than one such installation is made, each installation shall be separated from other installations by not less than 25 feet. Minimum distances between LP-gas containers need not be applied.

e. The following shall apply to aboveground containers installed alongside buildings:

1. LP-gas containers of less than a 125-gallon water capacity are allowed without a separation distance where in compliance with Items 2, 3, and 4.

2. Department of Transportation (DOTn) specification LP-gas containers shall be located and installed so that the discharge from the container pressure relief device is not less than three feet horizontally from building openings below the level of such discharge and shall not be beneath buildings unless the space is well ventilated to the outside and is not enclosed for more than 50% of its perimeter. The discharge from LP-gas container
pressure relief devices shall be located not less than five feet from exterior sources of ignition, openings into direct-vent (sealed combustion system) appliances or mechanical ventilation air intakes.

3. ASME LP-gas containers of less than a 125-gallon water capacity shall be located and installed such that the discharge from pressure relief devices shall not terminate in or beneath buildings and shall be located not less than five feet horizontally from building openings below the level of such discharge and not less than five feet from exterior sources of ignition, openings into direct vent (sealed combustion system) appliances, or mechanical ventilation air intakes.

4. The filling connection and the vent from liquid-level gauges on either DOTn or ASME LP-gas containers filled at the point of installation shall be not less than 10 feet from exterior sources of ignition, openings into direct vent (sealed combustion system) appliances or mechanical ventilation air intakes.

f. This distance is allowed to be reduced to not less than 10 feet for a single LP-gas container of 1,200-gallon water capacity or less, provided that such container is not less than 25 feet from other LP-gas containers of more than 125-gallon water capacity.

g. Aboveground LP-gas containers with a water capacity of 2,000 gallons or less shall be separated from public ways by a distance of not less than five feet. Containers with a water capacity greater than 2,000 gallons shall be separated from public ways in accordance with this table.

13VAC5-52-370. IFC Chapter 32 High-Piled Combustible Storage.

A. The following changes shall be made to Section 3201, General:

1. Change Section 3201.1 to read:

3201.1 Scope. Maintenance and operational aspects of high-piled combustible storage shall be in accordance with this chapter. In addition to the requirements of this chapter, the following material-specific requirements shall apply:

1. Aerosols shall be in accordance with Chapter 51.

2. Flammable and combustible liquids shall be in accordance with Chapter 57.

3. Hazardous materials shall be in accordance with Chapter 50.

4. Storage of combustible paper records shall be in accordance with the applicable NFPA 13 standard.

5. Storage of combustible fibers shall be in accordance with Chapter 37.

6. General storage of combustible material shall be in accordance with Chapter 3.

2. Change Section 3201.2 to read:

3201.2 Permits. A permit shall be required as set forth in Section 107.2.

3. Change Section 3201.3 and delete Sections 3201.3.1 and 3201.3.2.
Section 3201.3 to read:

3201.3 High-piled storage operational plan. Prior to the use and operation of high-piled storage in new structures or buildings requesting a change of occupancy or use, plans and specifications shall be submitted to the building official for review and approval. Following approval of the plans, a copy of the approved plans shall be maintained on the premises in an approved location. The onsite plans shall include the following applicable items:

1. Floor plan of the building showing locations and dimensions of high-piled storage areas.

2. Usable storage height for each storage area.

3. Number of tiers within each rack if applicable.

4. Commodity clearance between top of storage and the sprinkler deflector for each storage arrangement.

5. Aisle dimensions between each storage array.

6. Maximum pile volume for each storage array.

7. Location and classification of commodities in accordance with Section 3203 or the applicable building code.

8. Location of commodities that are banded or encapsulated.

9. Location of required fire department access doors.

10. Type of fire suppression and fire detection systems.

11. Location of valves controlling the water supply of ceiling and in-rack sprinklers.

12. Type, location, and specifications of smoke removal and curtain board systems.

13. Dimension and location of transverse and longitudinal flue spaces.

14. Additional information regarding required design features, commodities, storage arrangement, and fire protection features within the high-piled storage area when required by the fire code official.

B. The following changes shall be made to Section 3204, Designation of High-Piled Storage Areas:

1. Change Section 3204.1 to read:

3204.1 General. The operation and maintenance of high-piled storage areas and portions of high-piled storage areas intended for storage shall be maintained in accordance with the approved plan specified in Section 3201.3 and the applicable building code.

2. Delete Section 3204.2.

C. The following changes shall be made to Section 3206, General Fire Protection and Life Safety Features:

1. Change Section 3206.1 to read:

3206.1 General. Fire protection and life safety features for high-piled storage areas shall be maintained in accordance with Sections 3206.3 through 3206.10.

2. Delete Sections 3206.2 and 3206.2.1 and Table 3206.2.

3. Change Section 3206.3 to read:

3206.3 Separation of high-piled storage areas. High-piled storage areas shall be maintained as separated from other portions of the building where required by the storage plan in Section 3201.3 and the applicable building code.

4. Change Section 3206.3.1 to read:

3206.3.1 Separation from other uses. Mixed occupancies shall be maintained as separated in accordance with the storage plan in Section 3201.3 and the applicable building code.

5. Change Section 3206.3.2 to read:

3206.3.2 Multiple high-piled storage areas. Multiple high-piled storage areas shall be maintained in accordance with the storage plan in Section 3201.3 and the applicable building code.

6. Delete Section 3206.3.2.1.

7. Change Section 3206.4 to read:

3206.4 Automatic sprinklers. Automatic sprinkler systems shall be maintained in accordance with Chapter 9 and remain in accordance with the applicable building code.

3206.4.1 Pallets. The requirements based on the presence of pallets shall be maintained in accordance with the storage plan in Section 3201.3 and the applicable building code.

8. Change Section 3206.4.1.1 to read:

3206.4.1.1 Plastic pallets. Plastic pallets listed and labeled in accordance with UL 2335 or FM 4996 shall be treated as wood pallets.

9. Change Section 3206.5 to read:

3206.5 Fire detection. Fire detection provided for high-piled storage areas shall be maintained in accordance with Chapter 9 and remain in accordance with the approved storage plan in Section 3201.3 and the applicable building code.

10. Change Section 3206.6 to read:

3206.6 Building access. Where building access is required by the applicable building code, fire apparatus access roads shall remain and be maintained in accordance with Section 503.

11. Change Section 3206.7 to read:

3206.7 Access doors. Access doors shall be accessible and available at all times and remain in accordance with the approved storage plan in Section 3201.3 and the applicable building code.

12. Delete Sections 3206.7.1 through 3206.7.3.

13. Change Section 3206.7.5 to read:

3206.7.5 Number of doors required. The minimum number of doors shall be maintained in accordance with the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code.

14. Change Section 3206.7.6 to read:

3206.7.6 Door size and type. Access doors shall be maintained in accordance with the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code. Roll-up doors shall not be used unless approved.

15. Delete Sections 3206.7.7 and 3206.7.8.

16. Change Section 3206.8 to read:

3206.8 Smoke and heat removal. Where smoke and heat removal systems, including draft curtains, are required, they shall be maintained in accordance with Chapter 9 and the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code.

17. Change Section 3206.9 to read:

3206.9 Fire department hose connections. Where a standpipe system is provided, it shall be maintained in accordance with Chapter 9 and remain in accordance with the applicable building code.

18. Change Section 3206.10 to read:

3206.10 Aisles. Aisles separating storage piles or racks shall be maintained unobstructed and remain in accordance with the approved storage plan in Section 3201.3 and in accordance with the applicable building code.

19. Change Section 3206.10.1 to read:

3206.10.1 Width. Aisle width shall be maintained to the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code.

Exceptions:

1. Aisles crossing rack structures or storage piles, which are used only for employee access, shall be a minimum of 24 inches (610 mm) wide.

2. Aisles separating shelves classified as shelf storage shall be a minimum of 30 inches (762 mm) wide.

20. Change Section 3206.10.1.1 to read:

3206.10.1.1 Sprinklered buildings. Aisles in sprinklered buildings shall be maintained in accordance with the applicable building code.

21. Change Section 3206.10.1.2 to read:

3206.10.1.2 Nonsprinklered buildings. Aisles in nonsprinklered buildings shall be maintained in accordance with the applicable building code.

22. Change Section 3206.10.2 to read:

3206.10.2 Clear height. The required aisle width shall be maintained from the floor to ceiling in accordance with the approved storage plan in Section 3201.3 and in accordance with the applicable building code. Rack structural supports and catwalks are allowed to cross aisles at a minimum height of six feet, eight inches (2032 mm) above the finished floor level, provided that such supports do not interfere with fire department hose stream trajectory.

23. Change Section 3206.10.3 to read:

3206.10.3 Dead ends. Dead-end aisles shall not exceed the approved storage plan in Section 3201.3.

D. The following changes shall be made to Section 3207, Solid-Piled and Shelf Storage:

1. Change Section 3207.2 to read:

3207.2 Fire protection. Where automatic sprinklers are provided, they shall be maintained in accordance with the applicable building code.

2. Change Section 3207.2.1 to read:

3207.2.1 Shelf storage. Shelf storage greater than 12 feet (3658 mm) but less than 15 feet (4572 mm) in height shall be in accordance with the fire protection requirements set forth in the applicable building code. Shelf storage 15 feet (4572 mm) or more in height shall be protected in an approved manner as required by this code and the applicable building code.

3. Change Section 3207.3 to read:

3207.3 Pile dimension and height limitations. Pile dimensions, the maximum permissible storage height, and pile volume shall be maintained in accordance with the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code.

4. Change Section 3207.4 to read:

3207.4 Arrays. Where an automatic sprinkler system design utilizes protection based on a closed array, array clearances shall be maintained as specified by the standard used and approved storage plan in Section 3201.3.

E. The following changes shall be made to Section 3208, Rack Storage:

1. Change Section 3208.2 to read:

3208.2 Fire protection. Where automatic sprinklers are provided, they shall be maintained in accordance with Chapter 9.

2. Change Section 3208.2.2 to read:

3208.2.2 Racks with solid shelving. Racks with solid shelving having an area greater than 20 square feet (1.9 m^2), measured between approved flue spaces at all four edges of the shelf, shall be in accordance with this section.

Exceptions:

1. Racks with mesh, grated, slatted, or similar shelves having uniform openings not more than six inches (152 mm) apart, comprising not less than 50% of the overall shelf area, and with approved flue spaces are allowed to be treated as racks without solid shelves.

2. Racks used for the storage of combustible paper records with solid shelving shall be in accordance with the applicable NFPA 13 standard.

3. Change Section 3208.2.2.1 to read:

3208.2.2.1 Fire protection. Fire protection for racks with solid shelving shall be in accordance with the applicable building code.

4. Change Section 3208.3 to read:

3208.3 Flue spaces. Flue spaces shall be maintained in accordance with Table 3208.3 or the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code.

5. Change Section 3208.3.1 to read:

3208.3.1 Flue space protection. Where required by the fire code official, flue spaces required by the applicable building code in single-row, double-row, or multiple-row rack storage installations shall be equipped with approved devices to protect the required flue spaces. Such devices shall not be removed or modified.

6. Change Section 3208.4 to read:

3208.4 Column protection. Protection for steel building columns shall be maintained in accordance with approved storage plan in Section 3201.3 and Chapter 9 and remain in accordance with the applicable building code.

7. Change Section 3208.5 to read:

3208.5 Extra-high-rack storage systems. Approval shall be obtained prior to installing extra high rack combustible storage.

8. Change Section 3208.5.1 to read:

3208.5.1 Fire protection. Fire protection provided for buildings with extra high rack combustible storage shall be maintained in accordance with the applicable building code.

F. The following changes shall be made to Section 3209, Automated Storage:

1. Change Section 3209.2 to read:

3209.2 Automatic sprinklers. Where automatic sprinklers are provided, they shall be maintained in accordance with the applicable NFPA 13 standard.

2. Change Section 3209.3 to read:

3209.3 Carousel storage. High-piled storage areas having greater than 500 square feet (46 m^2) of carousel storage, including automatic shutdown devices, shall be maintained in accordance with the approved storage plan in Section 3201.3 and the applicable building code.

3. Change Section 3209.4 to read:

3209.4 Automated rack storage. High-piled storage areas with automated rack storage shall be maintained in accordance with the approved storage plan in Section 3201.3.

4. Change Section 3209.4.1 to read:

3209.4.1 Manual Activation shutdown. A manually activated emergency shutdown switch for use by emergency personnel shall be clearly identified and shall be maintained and accessible in accordance with the applicable building code.

5. Change Section 3209.4.2 to read:

3209.4.2 Automatic shutdown. Automatic shutdown, required by the applicable building code for high-piled combustible storage areas, shall be maintained in accordance with the applicable building code.

G. The following change shall be made to Section 3210, Specialty Storage:

Change Section 3210.1 to read:

3210.1 General. Records storage facilities used for the rack or shelf storage of combustible paper records greater than 12 feet (3658 mm) in height shall be maintained in accordance with Sections 3206 and 3208 and the approved storage plan in Section 3201.3 and remain in accordance with the applicable building code. Palletized storage of records shall be in accordance with Section 3207.

13VAC5-52-380. IFC Chapter 33 Fire Safety during Construction and Demolition.

Make the following changes to Chapter 33:

1. Change Section 3303.3.1 to read:

3303.3.1 Violations. Failure to properly conduct, document, and maintain documentation required by this section shall constitute an unlawful act in accordance with Section 111, and the fire code official may request a stop work order be issued by the building official.

2. Change Section 3303.5 to read:

3303.5 Fire safety for buildings of Types IV-A, IV-B, and IV-C construction. Buildings of Types IV-A, IV-B, and IV-C construction designed to be greater than six stories above grade plane shall comply with the following requirements during construction unless otherwise approved by the fire code official:

1. Standpipes shall be provided in accordance with Section 3313.

2. A water supply for fire department operations, as approved by the fire code official and the fire chief.

3. Fire safety construction features as required by the building official in accordance with the applicable building code.

3. Change Section 3305.9 to read:

3305.9 Separations between construction areas. Separations used in Type I and Type II construction to separate construction areas from occupied portions of the building shall be maintained in accordance with the applicable building code.

4. Change Exception 2 to Section 3307.2.1 to read (Exceptions 1 and 3 remain):

2. Piping systems regulated by the Virginia Fuel Gas Code.

5. Change Section 3311.1 to read:

3311.1 Required access. Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet (30 480 mm) of buildings and temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

6. Change Section 3312.1 to read:

3312.1 Stairways. Where building construction exceeds 40 feet (12,192 mm) in height above the lowest level of fire department vehicle access, a temporary or permanent stairway shall be maintained in accordance with the applicable building code. As construction progresses, such stairway shall be maintained in accordance with the applicable building code.

7. Change Section 3314.1 to read:

3314.1 Where required. Where required by the applicable building code, a temporary or permanent standpipe shall be maintained and remain in an operable condition so as to be available for use by the fire department.

8. Delete Sections 3314.2 and 3314.3.

9. Change Section 3315.1 to read:

3315.1 Completion before occupancy. In buildings where an automatic sprinkler system is required by this code or the applicable building code, the building or portion thereof shall not be occupied until the automatic sprinkler system has been tested and approved, except where approved by the building official.

13VAC5-52-390. IFC Chapter 34 Tire Rebuilding and Tire Storage.

A. Change Section 3401.1 to read:

3401.1 Scope. The maintenance and operation of tire rebuilding plants, tire storage, and tire byproduct facilities shall comply with this chapter and other applicable requirements of this code. Tire storage in buildings shall also comply with Chapter 32.

B. Change Section 3401.2 to read:

3401.2 Permit required. Permits shall be required as set forth in Section 107.2.

C. Change Section 3403.1 to read:

3403.1 Construction. Tire rebuilding plants shall maintain the requirements of the applicable building code, as to construction, separation from other buildings or other portions of the same building, and protection.

D. Change Section 3403.2 to read:

3403.2 Location. Unless otherwise approved by the applicable building code, buffing operations shall be located in a room separated from the remainder of the building housing the tire rebuilding or tire recapping operations by a fire-resistance-rated separation in accordance with the applicable building code.

E. Change Section 3406.1 to read:

3406.1 Required access. New and existing tire storage yards shall be provided with fire apparatus access roads in accordance with Section 503 and Section 3406.2.

13VAC5-52-400. IFC Chapter 35 Welding and Other Hot Work.

A. Change Section 3501.2 to read:

3501.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change the last sentence of Section 3504.3 to read:

Information shown on the permit shall be verified prior to signing the permit in accordance with Section 107.2.

13VAC5-52-410. IFC Chapter 36 Marinas.

A. Change Section 3603.5 to read:

3603.5 Electrical equipment. Electrical equipment shall be maintained in accordance with its listing, Section 608 of this code, and NFPA 303 as required for wet, damp, and hazardous locations.

B. Change Section 3604.2 to read:

3604.2 Standpipes. Marinas and boatyards equipped with standpipe systems shall be maintained in accordance with NFPA 303 and Chapter 9.

C. Change Section 3605.1 to read:

3605.1 Fuel dispensing. Marine motor fuel-dispensing facilities shall be in accordance with Chapter 23. For tanks subject to Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91), or Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580), see Section 5701.1.1.

13VAC5-52-420. IFC Chapter 37 Combustible Fibers.

A. Change Section 3701.3 to read:

3701.3 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 3703.5 to read:

3703.5 Dust collection. Where located within a building, equipment or machinery that generates or emits combustible fibers shall be operated with an approved dust-collecting and exhaust system in accordance with the applicable building code and maintained in accordance with Chapter 22.

C. Change Section 3704.3 to read:

3704.3 Storage of more than 100 cubic feet to 500 cubic feet. Loose combustible fibers in quantities exceeding 100 cubic feet (3 m^3) but not exceeding 500 cubic feet (14 m^3) shall be stored in rooms in accordance with the applicable building code.

Note: These rooms are typically required to be fire resistance rated in accordance with the applicable building code.

D. Change Section 3704.4 to read:

3704.4 Storage of more than 500 cubic feet to 1,000 cubic feet. Loose combustible fibers in quantities exceeding 500 cubic feet (14 m^3) but not exceeding 1,000 cubic feet (28 m^3) shall be stored in rooms in accordance with the applicable building code.

Note: These rooms are typically required to be fire resistance rated in accordance with the applicable building code.

E. Change Section 3704.5 to read:

3704.5 Storage of more than 1,000 cubic feet. Loose combustible fibers in quantities exceeding 1,000 cubic feet (28 m^3) shall be stored in rooms in accordance with the applicable building code.

Note: These rooms may be required to be fire resistance rated and protected by fire suppression systems in accordance with the applicable building code.

13VAC5-52-430. IFC Chapter 38 Higher Education Laboratories.

The following changes shall be made to Chapter 38 Higher Education Laboratories.

1. Change Sections 3801.1 and 3801.2 to read:

3801.1 Scope. Higher education laboratories and laboratory suites complying with the requirements of this chapter and the applicable building code shall be permitted to exceed the maximum allowable quantities of hazardous materials in control areas without requiring classification as a Group H occupancy.

3801.2 Application. The provisions of this chapter shall be applied as exceptions or additions to applicable requirements of this code. Unless specifically modified by this chapter, the storage, use, and handling of hazardous materials shall comply with the provisions in Chapters 50 through 67 and the applicable building code for quantities not exceeding the maximum allowable quantity.

2. Change Sections 3803.1, 3803.1.7, and 3803.2.1 to read:

3803.1 Scope. Higher education laboratories and laboratory suites shall be in accordance with the general safety provisions in Sections 3803.1.1 through 3803.2.2.

3803.1.7 Automatic fire-extinguishing systems. Where provided, an automatic sprinkler system shall be maintained in accordance with Chapter 9.

3803.2.1 Container size. The maximum container size for all hazardous materials shall be 5.3 gallons (20 L) for liquids, 50 pounds (22.7 kg) for solids, 100 cubic feet (2.83 m^3) for health-hazard gases per the applicable building code, and 500 cubic feet (14.15 m^3) for all other gases in accordance with the applicable building code.

Exception: Hazardous waste collection containers, for other than Class I flammable liquids and Class II combustible liquids are permitted to exceed 5.3 gallons (20 L) where approved.

3. Delete Section 3804.1.1.3 and Table 3804.1.1 and change Sections 3804.1 through 3804.1.1.2, 3804.1.1.4, and 3804.1.1.6 through 3804.1.2 to read:

3804.1 General. Where laboratory suites are provided, they shall be constructed in accordance with the applicable building code and approved by the building official.

3804.1.1 Laboratory suites. The number of laboratory suites and percentage of maximum allowable quantities of hazardous materials in laboratory suites shall be in accordance with the applicable building code.

3804.1.1.1 Separation from other non-laboratory areas. Laboratory suites shall maintain separation from other portions of the building in accordance with Chapter 7 and the applicable building code.

3804.1.1.2 Separation from other laboratory suites. Laboratory suites shall be separated from other laboratory suites in accordance with Chapter 7 and the applicable building code.

3804.1.1.4 Maximum number. The maximum number of laboratory suites shall be in accordance with the applicable building code. Where a building contains both laboratory suites and control areas, the total number of laboratory suites and control areas within a building shall not exceed the maximum number of laboratory suites in accordance with the applicable building code.

3804.1.1.6 Standby or emergency power. Emergency or standby power for higher education laboratory suites shall be maintained in accordance with Section 1203.2.14.

3804.1.1.7 Ventilation. Ventilation shall be maintained in accordance with Chapter 7 of NFPA 45 and the applicable building code.

3804.1.1.8 Liquid-tight floor. Portions of laboratory suites where hazardous materials are present shall be maintained with a liquid-tight floor in accordance with the applicable building code.

3804.1.1.9 Automatic fire-extinguishing systems. Buildings containing laboratory suites shall be maintained throughout with an approved automatic sprinkler system in accordance with Chapter 9.

3804.1.2 Percentage of maximum allowable quantity in each laboratory suite. The percentage of maximum allowable quantities of hazardous materials in each laboratory suite shall be in accordance with the applicable building code.

4. Delete Table 3805.4 and change Sections 3805.1 through 3805.4 to read:

3805.1 Scope. Storage and use of hazardous materials in existing higher education laboratories located within existing buildings not equipped throughout with an automatic sprinkler system is permitted where such use complies with the applicable building code, Section 3803, Chapters 50 through 67, as applicable, and Sections 3805.2 through 3805.4.

3805.2 Nonsprinklered laboratories. The maximum allowable quantities of hazardous materials in storage and use in control areas in higher education laboratories located in buildings not equipped throughout with an automatic sprinkler system in accordance with the applicable NFPA 13 standard shall be in accordance with the applicable building code and Sections 3805.2.1 and 3805.2.2.

3805.2.1 Restricted materials storage. Where approved in accordance with the applicable building code, storage of the following hazardous materials in buildings not

equipped throughout with an automatic sprinkler system to the applicable NFPA 13 standard are allowed within a higher education laboratory control area where maintained in accordance with this section:

1. Pyrophorics.

2. Class 4 Oxidizers.

Additional quantity increases shall be prohibited, and such materials shall be stored in accordance with all of the following:

1. Containers shall be completely sealed and stored in accordance with the manufacturer's recommendations.

2. Storage shall be within approved hazardous material storage cabinets in accordance with Section 5003.8.7 or shall be located in an inert atmosphere glove box in accordance with NFPA 45, Section 7.11.

3. The storage cabinet or glove box shall not contain any storage of incompatible materials.

3805.2.2 Restricted materials use. Where approved by the applicable building code, the use of the following hazardous materials in buildings not equipped throughout with an automatic sprinkler system in accordance with the applicable NFPA 13 standard shall be allowed within a higher education laboratory control area where maintained in accordance with this section:

1. Pyrophorics.

2. Class 4 Oxidizers.

Additional quantity increases shall be prohibited, and such materials shall only be used in accordance with all of the following:

1. Use shall be within an approved chemical fume hood listed in accordance with UL 1805 or in an inert atmosphere glove box in accordance with NFPA 45, Section 7.11 or other approved equipment designed for the specific hazard of the material.

2. Combustible materials shall be kept not less than two feet (610 mm) away from the work area, except for those items directly related to the research.

3. A portable fire extinguisher appropriate for the specific material shall be provided within 20 feet (6096 mm) of the use in accordance with Section 906.

3805.3 Restricted materials automatic fire detection. Where provided in higher education laboratories in nonsprinklered buildings, an automatic fire detection system shall be maintained in accordance with Chapter 9.

3805.3.1 System supervision and monitoring. Where required or provided, automatic fire detection systems shall be electronically supervised and monitored by an approved supervising station or, where approved, shall initiate an audible and visual signal at a constantly attended, onsite location.

3805.4 Percentage of maximum allowable quantity per control area. The percentage of maximum allowable quantities per control area of hazardous materials in higher education laboratories in existing nonsprinklered buildings shall be permitted to be increased only in accordance with the applicable building code and approval from the Building Official.

5. Delete Table 3806.2.1 and change Sections 3806.1 through 3806.2.1 to read:

3806.1 Scope. Storage and use of hazardous materials in existing higher education laboratories within buildings equipped throughout with an automatic sprinkler system in accordance with the applicable NFPA 13 standard shall be in accordance with Section 3803 and Chapters 50 through 67, as applicable, except as modified by this section.

3806.2 Hazardous materials storage and use. Storage and use of hazardous materials within control areas in higher education laboratories equipped with an automatic sprinkler system shall be in accordance with this section and Chapters 50 through 67, as applicable.

Exception: Existing laboratories in buildings equipped throughout with an automatic sprinkler constructed and approved as laboratory suites in accordance the applicable building code are permitted to comply with Section 3804.

3806.2.1 Percentage of maximum allowable quantities per control area. The percentage of maximum allowable quantities per control area of hazardous materials in higher education laboratories equipped with an automatic sprinkler system shall be in accordance with the applicable building code.

13VAC5-52-440. IFC Chapter 39 Processing and Extraction Facilities.

Delete Sections 3904.2.2.1 through 3904.2.2.3 and change Sections 3901.1, 3901.3, 3903.1, 3903.4.1, 3904.1, 3904.2.1, 3904.2.2, 3905.1, and 3905.1.1 to read:

1. 3901.1 Scope. Plant processing or extraction facilities shall comply with this chapter and the applicable building code. The extraction process includes the act of extraction of the oils and fats by use of a solvent, desolventizing of the raw material, production of the miscella, distillation of the solvent from the miscella, and solvent recovery. The use, storage, transfilling, and handling of hazardous materials in these facilities shall comply with this chapter, other applicable provisions of this code, and the applicable building code.

2. 3901.3 Permits. Permits shall be required as set forth in Section 107.2.

3. 3903.1 Locations. Processing located in a building shall be maintained in accordance with the applicable building code.

4. 3903.4.1 Industrial ovens. The use of industrial ovens shall comply with the applicable building code and Chapter 30.

5. 3904.1 General requirements. Systems and equipment used with the processing and extraction of oils and products from plants shall comply with Chapter 50, other applicable provisions of this code, and the applicable building code.

6. 3904.2.1 Listings. Systems or equipment used for the extraction of oils from plant material shall be listed and labeled in accordance with the applicable building code and be operated and maintained in accordance with the listing and the manufacturer's instructions.

7. 3904.2.2 Approvals. Systems or equipment used for the extraction of oils from plant material shall be approved in accordance with the applicable building code.

8. 3905.1 Gas detection. Continuous gas detection system provided in accordance with the applicable building code for extraction processes utilizing flammable gases as solvents shall be maintained as approved. The gas detection threshold shall be not greater than 25% of the lower explosive limit or lower flammable limit (LEL/LFL) of the materials, unless otherwise approved in accordance with the applicable building code.

9. 3905.1.1 System design. Flammable gas detection system provided in accordance with the applicable building code shall be calibrated to the types of fuels or gases used for the extraction process. The gas detection system shall be maintained. The gas detection threshold shall be not greater than 25% of the lower explosive limit or lower flammability limit (LEL/LFL) of the materials, unless otherwise approved in accordance with the applicable building code.

13VAC5-52-450. IFC Chapter 40 Storage of Distilled Spirits and Wines.

A. Make the following changes to Section 4003:

1. Change Section 4003.1 to read:

4003.1 Spill control. Where provided or required by the applicable building code, drainage or containment systems, including curbs, scuppers, special drains, or other suitable means to prevent the flow of spills throughout the building, shall be maintained.

2. Change Section 4003.2 to read:

4003.2 Ventilation. For rooms and spaces where distilled spirits and wines in barrels and casks are stored, ventilation shall be operated and maintained in accordance with the applicable building code to prevent vapors from concentrating above 25% of the lower flammable limit.

3. Change Section 4003.4 to read:

4003.4 Lightning. Lightning protection equipment shall be maintained in accordance with the applicable NFPA 70 and NFPA 780.

B. Make the following changes to Section 4004:

Change Section 4004.3 to read:

4004.3 Basement storage. Class I liquids shall be allowed to be stored in basements in amounts not exceeding the maximum allowable quantity per control area for use-open systems where approved in accordance with the applicable building code, and automatic suppression or other fire protection systems are maintained in accordance with Chapter 9. Class II and Class IIIA liquids shall also be allowed to be stored in basements where approved in accordance with the applicable building code and automatic suppression or other fire protection systems are maintained in accordance with Chapter 9.

C. Make the following changes to Section 4005:

Delete Section 4005.1.

13VAC5-52-460. Reserved.

13VAC5-52-470. Reserved.

13VAC5-52-480. IFC Chapter 50 Hazardous Materials - General Provisions.

A. The following changes shall be made to Section 5001, General:

1. Change Section 5001.1 to read:

5001.1 Scope. Prevention, control, and mitigation of dangerous conditions related to storage, dispensing, use, and handling of hazardous materials shall be in accordance with this chapter for operational usage. Quantities within buildings shall be maintained in accordance with the applicable building code.

This chapter shall apply to all hazardous materials, including those materials regulated elsewhere in this code, except that where specific requirements are provided in other chapters, those specific requirements shall apply in accordance with the applicable chapter. Where a material has multiple hazards, all hazards shall be addressed.

Exceptions:

1. In retail or wholesale sales occupancies, the quantities of medicines, foodstuff or consumer products, and cosmetics containing not more than 50% by volume of water-miscible liquids and with the remainder of the solutions not being flammable shall not be limited, provided such materials are packaged in individual containers not exceeding 1.3 gallons (5 L).

2. Quantities of alcoholic beverages in retail or wholesale sales occupancies shall not be limited providing the liquids are packaged in individual containers not exceeding 1.3 gallons (5 L).

3. Application and release of pesticide and agricultural products and materials intended for use in weed abatement, erosion control, soil amendment, or similar

applications where applied in accordance with the manufacturer's instructions and label directions.

4. The offsite transportation of hazardous materials where in accordance with U.S. Department of Transportation regulations.

5. Building materials not otherwise regulated by this code.

6. Refrigeration systems (see Section 608).

7. Stationary storage battery systems regulated by Section 1207.

8. The display, storage, sale, or use of fireworks and explosives in accordance with Chapter 56.

9. Corrosives utilized in personal and household products in the manufacturer's original consumer packaging in Group M occupancies.

10. The storage of distilled spirits and wines in wooden barrels and casks.

11. The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or Class II liquids where in accordance with Section 5705.5.

12. Specific provisions for flammable liquids in motor fuel-dispensing facilities, repair garages, airports, and marinas in Chapter 23.

13. Storage and use of fuel oil in tanks and containers connected to oil-burning equipment. Such storage and use shall be in accordance with Section 605. For abandonment of fuel oil tanks, Chapter 57 applies.

14. Storage and display of aerosol products complying with Chapter 51.

15. Storage and use of flammable or combustible liquids that do not have a fire point when tested in accordance with ASTM D92 not otherwise regulated by this code.

16. Flammable or combustible liquids with a flash point greater than 95°F (35°C) in a water-miscible solution or dispersion with a water and inert (noncombustible) solids content of more than 80% by weight that do not sustain combustion, not otherwise regulated by this code.

17. Commercial cooking oil storage tank systems located within a building and designed and installed in accordance with Section 607 and NFPA 30.

2. Delete Section 5001.1.1.

3. Change Section 5001.3.3.9 to read:

5001.3.3.9 Reliable power source. Where a power supply is relied upon to prevent or control an emergency condition that could endanger people or property, the power supply shall be maintained in accordance with the applicable building code.

4. Change Section 5001.3.3.10 to read:

5001.3.3.10 Ventilation. Where ventilation is required by the applicable building code, it shall be maintained.

5. Change Section 5001.5 to read:

5001.5 Permits. Permits shall be required as set forth in Section 107.2.

6. Add the following language to the end of Section 5001.5.1 to read:

The Hazardous Materials Management Plan (HMMP) shall be maintained onsite for use by emergency responders and shall be updated not less than annually.

7. Add the following language to the end of Section 5001.5.2 to read:

The Hazardous Materials Information System (HMIS) shall be maintained onsite or readily available through another means where approved by the fire code official for use by temporary responders, and shall be updated not less than annually.

8. Add Sections 5001.5.3, 5001.5.3.1, and 5001.5.3.2 to read:

5001.5.3 Repository container. When a HMMP or HMIS is required, the owner or operator shall provide a repository container (lock box) or other approved means for the storage of items required in Sections 5001.5.1 and 5001.5.2 so as to be readily available to emergency response personnel.

5001.5.3.1 Location and identification. The repository container (lock box) shall be located, installed, and identified in an approved manner.

5001.5.3.2 Keying. All repository containers (lock boxes) shall be keyed as required by the fire code official.

9. Add Section 5001.7, including subsections, to read:

5001.7 Operational requirements for Group B teaching and research laboratories. Teaching and research laboratories in Group B educational occupancies above the 12th grade utilizing Section 428 of the USBC, Part I, Construction, or Section 306.1 of the USBC, Part II, Existing Buildings, shall comply with this section and other applicable requirements of this code. In the case of conflicts between the requirements of Section 428 of the USBC, Part I, Construction or Section 306.1 of the USBC, Part II, Existing Buildings and provisions of this code other than those set out in this section, Section 428 of the USBC, Part I, Construction or Section 306.1 of the USBC, Part II, Existing Buildings, as applicable, shall govern.

5001.7.1 Chemical safety reviews. Operating and emergency procedures planning and documentation shall be as set out in Sections 5001.3.3.11 through 5001.3.3.17. Such documentation shall be prepared by laboratory safety personnel or special experts and shall be made available in the workplace for reference and review by employees. Copies of such documentation shall be furnished to the fire code official for review upon request.

5001.7.2 Hazardous materials handling. Receiving, transporting onsite, unpacking, and dispensing of hazardous materials shall be carried out by persons trained in proper handling of such materials and shall be performed in accordance with Chapters 50 through 67, as applicable.

5001.7.3 Hazard identification signage. Warning signs for other than building components shall be provided in accordance with Section 5003.5.

5001.7.4 Maintenance of equipment, machinery, and processes. Maintenance of equipment, machinery, and processes used with hazardous materials shall comply with Section 5003.2.6.

5001.7.5 Time sensitive materials. Containers of materials that have the potential to become hazardous during prolonged storage shall be dated when first opened and shall be managed in accordance with NFPA 45, Section 8.2.4.4.1.

5001.7.6 Maintenance of storage, dispensing, use, and handling requirements. Storage, dispensing, use, and handling requirements in the USBC, Part I, Construction or the USBC, Part II, Existing Buildings shall be maintained. Operational requirements not affecting the manner of construction shall comply with this chapter and Chapters 51 through 67, as applicable.

5001.7.7 Hazardous wastes. Storage, dispensing, use, and handling of hazardous waste shall comply with this chapter and Chapters 51 through 67, as applicable.

5001.7.8 Container size. The maximum container size for all hazardous materials shall be 5.3 gallons (20 L) for liquids, 50 pounds (23 kg) for solids, 100 cubic feet (2.8. m^3) for health hazard gases, and 500 cubic feet (14 m^3) for all other gases.

Exception: Hazardous waste collection containers for other than Class I and Class II flammable liquids are permitted to exceed 5.3 gallons (20 L) where approved.

5001.7.9 Density. Quantities of Class I, Class II, and Class IIIA combustible or flammable liquids in storage and use within control areas or laboratory suites shall not exceed eight gallons per 100 square feet (30 L/9.3 m^2) of floor area, with not more than four gallons per 100 square feet (15 L/9.3 m^2) being in use. Quantities of Class I flammable liquids in storage and use shall not exceed four gallons per 100 square feet (15 L/9.3 m^2) of floor area with not more than two gallons (7.5 L) being in use. The maximum in use in open systems is limited to 10% of these quantities. Densities shall be reduced by 25% on the 4th-floor through 6th-floor levels above grade plane of the building and 50% above the 6th-floor level. The density is to be reduced to 50% of these values for buildings that are not protected throughout with an approved automatic fire sprinkler system. Regardless of the density, the maximum allowable quantity per control area or laboratory suite shall not be exceeded.

Exception: Density limits may be exceeded in designated hazardous waste collection areas or rooms within a control area or laboratory suite, but stored quantities shall not exceed the maximum allowable quantity per laboratory suite or control area.

5001.7.10 Restricted materials in storage. Storage of pyrophorics and Class 4 oxidizers prohibited in existing buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the USBC, Part I, Construction shall be allowed within a control area at 25% of the limits for a building equipped throughout with an automatic sprinkler system with no additional increases allowed, provided that such materials are stored in accordance with all of the following:

1. Containers shall be completely sealed and stored according to the manufacturer's recommendations.

2. Storage shall be within approved hazardous materials storage cabinets in accordance with Section 5003.8.7 or shall be located in an inert atmosphere glove box in accordance with NFPA 45, Section 7.11.

3. The storage cabinet or glove box shall not contain any storage of incompatible materials.

5001.7.11 Restricted materials in use. Use of pyrophorics and Class 4 oxidizers prohibited in existing buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the USBC, Part I, Construction shall be allowed within a control area at 25% of the limits for buildings equipped throughout with an automatic sprinkler system with no additional increases allowed, provided that such materials are used in accordance with all of the following:

1. Use shall be within an approved chemical fume hood listed in accordance with UL 1805, or in an inert atmosphere glove box in accordance with NFPA 45, Section 7.11, or other approved equipment designed for the specific hazard of the material.

2. Combustible materials shall be kept at least two feet (610 mm) away from the work area, except for those items directly related to the research.

3. A portable fire extinguisher appropriate for the specific material shall be provided within 20 feet (6096 mm) of the use in accordance with Section 906.

B. The following changes shall be made to Section 5003, General Requirements:

1. Change Section 5003.1.1 and delete Table 5003.1.1(1).

5003.1.1 Maximum allowable quantity per control area. The maximum allowable quantity per control area shall be maintained in accordance with the applicable building code or Table 5003.1.1(3) and Table 5003.1.1(4) for outdoor control areas.

2. Delete Table 5003.1.1(2) and change Sections 5003.1.3 and 5003.1.4 to read:

5003.1.3 Quantities not exceeding the maximum allowable quantity per control area. The storage, use, and handling of hazardous materials in quantities not exceeding the maximum allowable quantity per control area indicated in the applicable building code shall be in accordance with Sections 5001 and 5003. For outdoor control areas, quantities exceeding the maximum allowable quantity per control area indicated in Table 5003.1.1(3) or Table 5003.1.1(4) shall be in accordance with Sections 5001 and 5003.

5003.1.4 Quantities exceeding the maximum allowable quantity per control area. The storage, use, and handling of hazardous materials in quantities exceeding the maximum allowable quantity per control area indicated in the applicable building code shall be approved by the building official in accordance with the applicable building code and maintained in accordance with this chapter. For outdoor control areas, quantities exceeding the maximum allowable quantity per control area indicated in Table 5003.1.1(3) or Table 5003.1.1(4) shall be in accordance with this chapter.

3. Change Section 5003.2 to read:

5003.2 Systems, equipment, and processes. Systems, equipment, and processes utilized for storage, dispensing, use, or handling of hazardous materials shall be in accordance with Sections 5003.2.1 through 5003.2.9.

4. Change Section 5003.2.1 to read:

5003.2.1 Design and construction of containers, cylinders, and tanks. Portable containers and cylinders shall be designed and constructed in accordance with approved standards. Containers, cylinders, and other means used for containment of hazardous materials shall be of an approved type. Pressure vessels not meeting U.S. Department of Transportation requirements for transportation shall comply with the ASME Boiler and Pressure Vessel Code.

Tanks shall be installed in accordance with the applicable building code and shall be maintained.

5. Change Section 5003.2.2 to read:

5003.2.2 Piping, tubing, valves, and fittings. Piping, tubing, valves, and fittings conveying hazardous materials shall be maintained in accordance with ASME B31 or other approved standards in accordance with the applicable building code.

6. Delete Sections 5003.2.2.1 and 5003.2.2.2.

7. Change Section 5003.2.3 to read:

5003.2.3 Equipment, machinery, and alarms. Equipment, machinery, and detection and alarm systems associated with the use, storage, or handling of hazardous materials shall be listed or approved.

8. Change Section 5003.2.4 to read:

5003.2.4 Installation of tanks. Installation of tanks shall be in accordance with Sections 5003.2.4.1 through 5003.2.4.2.1. For tanks subject to Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91) or Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580), see Section 5701.1.1.

9. Change Section 5003.2.4.1 to read:

5003.2.4.1 Underground tanks. Where provided or required by the applicable building code, secondary containment for underground tanks shall be maintained. In lieu of secondary containment for an underground tank, an aboveground tank in an underground vault complying with the applicable building code shall be permitted.

10. Change Section 5003.2.4.2 to read:

5003.2.4.2 Aboveground tanks. Aboveground stationary tanks used for the storage of hazardous materials shall be maintained in accordance with the requirements for outdoor storage of the particular material involved.

Exception: Aboveground tanks that are installed in vaults complying with the applicable building code and maintained in accordance with Section 5303.16 or 5704.2.8 shall not be required to comply with location and protection requirements for outdoor storage.

11. Change Sections 5003.2.7 and 5003.2.8 to read:

5003.2.7 Liquid-level limit control. Where provided or required by the applicable building code, liquid-level limit controls, or other approved means to prevent overfilling of atmospheric tanks having a capacity greater than 500 gallons (1893 L) and that contain hazardous material liquids shall be maintained.

5003.2.8. Seismic protection. Where provided, bracing and anchoring for machinery and equipment utilizing hazardous materials shall be maintained in accordance with the applicable building code.

12. 5003.2.9.1 Equipment, devices, and systems requiring testing. The following equipment, systems, and devices shall be tested in accordance with Sections 5003.2.9 and 5003.2.9.2.

1. Gas detection systems, alarms, and automatic emergency shutoff valves required by Section 6004.2.2.10 for highly toxic and toxic gases.

2. Limit control systems for liquid level, temperature, and pressure required by Sections 5004.8 and 5005.1.4.

3. Emergency alarm systems and supervision required by Sections 5004.9 and 5005.4.4.

4. Monitoring and supervisory systems required by the applicable building code.

5. Manually activated shutdown controls required by the applicable building code for compressed gas systems conveying pyrophoric gases.

13. Change Section 5003.3.1.4 to read:

5003.3.1.4 Responsibility for cleanup. The person, firm, or corporation responsible for an unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharge, whether sudden or gradual, at no cost to the jurisdiction. The fire code official may require records and receipts to verify cleanup and proper disposal of unauthorized discharges. When deemed necessary by the fire code official, cleanup may be initiated by the fire department or by an authorized individual or firm. Costs associated with such cleanup shall be the responsibility of the owner, operator, or other person responsible for the unauthorized discharge.

Note: Owners and operators of certain underground and aboveground petroleum storage tanks may have access to the Virginia Petroleum Storage Tank Fund for reimbursement of some cleanup costs associated with petroleum discharges from these tanks. See Article 10 (§ 62.1-44.34:10 et seq.) of Title 62.1of the Code of Virginia.

14. Change Sections 5003.8 and 5003.8.1 to read:

5003.8 Construction requirements. Buildings, control areas, enclosures, and cabinets for hazardous materials shall be in accordance with Sections 5003.8.1 through 5003.8.6.3.

5003.8.1 Buildings. Buildings or portions thereof in which hazardous materials are stored, handled, or used shall be maintained in accordance with the applicable building code.

15. Change Section 5003.8.2 and change Table 5003.8.2 to Table 5003.12 Outdoor Separation and replace "a detached building" on the top row of the Table with "separation":

5003.8.2 Detached buildings. Group H occupancies containing quantities of hazardous materials in excess of those set forth in the applicable building code shall be approved by the building official and located in accordance with the applicable building code.

16. Change Sections 5003.8.3 through 5003.8.3.2 to read:

5003.8.3 Control areas. Control areas shall comply with Sections 5003.8.3.1 through 5003.8.3.5.

Exception: Higher education laboratories in accordance with Chapter 38 and the applicable building code.

5003.8.3.1 Control area. Fire barriers separating control areas shall be maintained in accordance with Chapter 7.

5003.8.3.2 Percentage of maximum allowable quantities. The percentage of maximum allowable quantities of hazardous materials per control area allowed at each floor level within a building shall be maintained in accordance with this chapter and the applicable building code.

17. Delete Table 5003.8.3.2.

18. Change Section 5003.8.3.3 to read:

5003.8.3.3 Number. The maximum number of control areas per floor within a building shall be maintained in accordance with this chapter and the applicable building code.

19. Delete Section 5003.8.3.4.

20. Delete Sections 5003.8.3.5.1 through 5003.8.3.5.3 and change Section 5003.8.3.5 to read:

5003.8.3.5 Hazardous material in Group M display and storage areas and in Group S storage areas. The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials allowed within a single control area of a Group M display and storage area or a Group S storage area shall comply with this chapter and the applicable building code. The aggregate quantity is allowed to exceed the maximum allowable quantities per control area specified in the applicable building code without classifying the building or use as a Group H occupancy, provided that the materials are displayed and stored in accordance with Section 5003.11 and the applicable building code.

21. Change Sections 5003.8.4 through 5003.8.5.3 and 5003.8.6.2 to read:

5003.8.4 Gas rooms. Where a gas room is provided it shall be maintained in accordance with the provisions of Chapter 60, this chapter, and the applicable building code.

5003.8.4.1 Protection. Where provided or required by the applicable building code, fire protection systems and fire-rated separation shall be maintained.

5003.8.4.2 Ventilation system. Where provided or required by the applicable building code, ventilation systems for gas rooms shall be operated and maintained. Highly toxic and toxic gases shall comply with Section 6004.2.2.6 and the applicable building code.

5003.8.5 Exhausted enclosures. Where an exhausted enclosure is used to increase maximum allowable quantity per control area, the exhausted enclosure shall be maintained in accordance with this chapter, Chapter 60, and the applicable building code.

5003.8.5.1 Materials. Exhausted enclosures shall be maintained as approved by the applicable building code. Where noncombustible materials were required by the applicable building code, combustible materials are prohibited.

5003.8.5.2 Ventilation. Where provided or required by the applicable building code, the ventilation system for exhausted enclosures shall be operated and maintained. Ventilation systems used for highly toxic and toxic gases shall comply with this chapter; Items 1, 2, and 3 of Section 6004.1.3; and the applicable building code.

5003.8.5.3 Fire-extinguishing system. Where provided or required by the applicable building code, fire-extinguishing systems for exhaust enclosures shall be maintained in accordance with Chapter 9 and the applicable building code.

5003.8.6.2 Ventilation. Where provided or required by the applicable building code, the ventilation system for gas cabinets shall be operated and maintained. Ventilation systems used for highly toxic and toxic gases shall comply with this chapter; Items 1, 2, and 3 of Section 6004.1.2; and the applicable building code.

22. Change Section 5003.9.9 to read:

5003.9.9 Shelf storage. Shelving shall be of substantial construction and shall comply with the requirements of this chapter and the applicable building code. Shelving shall be treated, coated, or constructed of materials that are compatible with the hazardous materials stored. Shelves shall be provided with a lip or guard when used for the storage of individual containers.

Exceptions:

1. Storage in hazardous material storage cabinets or laboratory furniture specifically designed for such use.

2. Storage of hazardous materials in amounts not requiring a permit in accordance with Section 5001.5.

Shelf storage of hazardous materials shall be maintained in an orderly manner.

23. Change Section 5003.11 to read:

5003.11 Group M storage and display and Group S storage. The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials stored and displayed within a single control area of a Group M occupancy or an outdoor control area or stored in a single control area of a Group S occupancy is allowed to exceed the maximum allowable control area indicated in Section 5003.1 and the applicable building code when maintained in accordance with Sections 5003.11.1 through 5003.11.3.10.

24. Change Section 5003.11.1 to read:

5003.11.1 Maximum allowable quantity per control area in Group M or Group S occupancies. The aggregate amount of nonflammable solid and nonflammable or noncombustible liquid hazardous materials stored and displayed within a single control area of a Group M occupancy or stored in a single control area of a Group S occupancy shall not exceed the amounts set forth in the applicable building code.

25. Rename Table 5003.11.1 to Table 5003.11.1 Maximum Allowable Quantity Per Outdoor Control Area in Group M And S Occupancies—Nonflammable Solids, Nonflammable, and Noncombustible Liquids.

26. Change footnote "b" of Table 5003.11.1 to read:

Maximum allowable quantities shall be increased 100% in buildings equipped throughout with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard. Where Note c applies, the increase for both notes shall be applied accumulatively.

27. Change Section 5003.11.2 to read:

5003.11.2 Maximum allowable quantity per outdoor control area in Group M or Group S occupancies. The aggregate amount of nonflammable solid and nonflammable or noncombustible liquid hazardous materials stored and displayed within a single outdoor control area of a Group M occupancy shall not exceed the amounts set forth in Table 5003.11.1.

28. Change Section 5003.11.3 to read:

5003.11.3 Storage and display. Storage and display shall be in accordance with Sections 5003.11.3.1 through 5003.11.3.10.

29. Change Section 5003.11.3.1 to read:

5003.11.3.1 Density. Storage and display of solids shall not exceed the density of floor area allowed by the applicable building code. Storage and display of liquids shall not exceed the amount per square foot allowed by the applicable building code.

30. Change Section 5003.11.3.2 to read:

5003.11.3.2 Storage and display height. Unless otherwise approved in accordance with the applicable building code, display height shall not exceed six feet (1829 mm) above the finished floor in display areas of Group M occupancies Storage height shall not exceed eight feet (2438 mm) above the finished floor in storage areas of Group M and Group S occupancies.

Storage height shall not exceed eight feet (2438 mm) above the finished floor in storage areas of Group M and Group S occupancies.

31. Change Section 5003.11.3.4 to read:

5003.11.3.4 Racks and shelves. Racks and shelves used for storage or display shall be maintained in accordance with Section 5003.9.9.

32. Change Section 5003.11.3.8 to read:

5003.11.3.8 Floors. Floors shall be maintained in accordance with Section 5004.12 unless otherwise approved by the applicable building code.

C. The following changes shall be made to Section 5004, Storage:

1. Change Section 5004.1 to read:

5004.1 Scope. Storage of hazardous materials in amounts exceeding the maximum allowable quantity per control area shall be maintained in accordance with Sections 5001, 5003, and 5004 and the applicable building code. Storage of hazardous materials in amounts not exceeding the maximum allowable quantity per control area shall be in accordance with Sections 5001 and 5003 and the applicable building code. Retail and wholesale storage and display of nonflammable solid and nonflammable and noncombustible liquid hazardous materials in Group M occupancies and Group S storage shall be maintained in accordance with Section 5003.11 and the applicable building code.

2. Change Sections 5004.2 through 5004.2.2.1 to read:

5004.2 Spill control and secondary containment for liquid and solid hazardous materials. Spill control and secondary containment for rooms, buildings, or areas used for the storage of liquid or solid hazardous materials shall be maintained in accordance with Sections 5004.2.1 through 5004.2.3 and the applicable building code.

Exception: Outdoor storage of containers on approved containment pallets in accordance with Section 5004.2.3.

5004.2.1 Spill control for hazardous material liquids. Where provided or required by the applicable building code, spill control for hazardous materials shall be maintained. For individual vessels having a capacity of more than 55 gallons (208 L) or in which the aggregate capacity of multiple vessels exceeds 1,000 gallons (3785 L), spill control shall be maintained to prevent the flow of liquids to adjoining areas in accordance with the applicable building code.

5004.2.2 Secondary containment for hazardous material liquids and solids. Where provided or required by the applicable building code, secondary containment for hazardous materials shall be maintained.

5004.2.2.1 Containment and drainage methods. Facilities, equipment, and method used for containment and drainage of hazardous materials and fire protection water shall be maintained in accordance with this chapter and the applicable building code.

3. Change Section 5004.2.2.1 to read:

5004.2.2.1 Containment and drainage methods. Facilities, equipment, and method used for containment and drainage of hazardous materials and fire protection water shall be maintained in accordance with this chapter and the applicable building code.

4. Delete Section 5004.2.2.3.

5. Change Sections 5004.2.2.5 and 5004.2.2.6 to read:

5004.2.2.5 Monitoring. An approved monitoring method shall be provided to detect hazardous materials in the secondary containment system. The monitoring method is allowed to be visual inspection of the primary or secondary containment or other approved means. Where secondary containment is subject to the intrusion of water, a monitoring method for detecting water shall be provided. Where monitoring devices are provided, they shall be maintained in accordance with the applicable building code.

5004.2.2.6 Drainage system design. Drainage systems shall be maintained in accordance with this chapter and the applicable building code.

6. Change Section 5004.3 to read:

5004.3 Ventilation. Indoor storage areas and storage buildings shall maintain ventilation in accordance with the applicable building code and shall be operated and maintained in accordance with this chapter. Storage areas for flammable solids shall comply with Chapter 59.

7. Delete Section 5004.3.1.

8. Change Section 5004.5 to read:

5004.5 Automatic sprinkler systems. Automatic sprinkler systems for the storage of hazardous materials shall be maintained in accordance with this chapter, Chapter 9, and the applicable building code.

9. Change Section 5004.6 to read:

5004.6 Explosion control. Explosion control for storage rooms, areas, and buildings shall be maintained in accordance with this chapter, Chapter 9, and the applicable building code.

10. Change Section 5004.7 to read:

5004.7 Standby or emergency power. Where mechanical ventilation, treatment systems, temperature control, alarm, detection, or other electrically operated systems are required to have emergency or standby power systems in accordance with the applicable building code, those power systems shall be operated and maintained in accordance with NFPA 70, Section 1203, and this chapter.

11. Delete Section 5004.7.1.

12. Delete Section 5004.7.2.

13. Change Sections 5004.8 through 5004.8.2 to read:

5004.8 Limit controls. Limit controls shall be maintained in accordance with Sections 5004.8.1 and 5004.8.2.

5004.8.1 Temperature control. Where provided or required by the applicable building code, temperature control devices for materials that must be kept at temperatures other than normal ambient temperatures to prevent a hazardous reaction shall be maintained to keep the temperature within a safe range.

5004.8.2 Pressure control. Where provided or required by the applicable building code, pressure control devices on stationary tanks and equipment containing hazardous material liquids that can generate pressures exceeding design limits because of exposure fires or internal reaction shall be maintained to relieve excessive internal pressure.

14. Change Section 5004.9 to read:

5004.9 Emergency alarm. Where provided or required by the applicable building code, manual emergency alarm systems in rooms or areas used for storage of hazardous materials shall be maintained in accordance with Chapter 9 and the applicable building code.

15. Change Section 5004.10 to read:

5004.10 Supervision and monitoring. Where emergency alarm, detection, and automatic fire-extinguishing systems are required by the applicable building code to be electrically supervised, they shall maintain monitoring by an approved supervising station or, when approved, sound an audible and visual signal at a constantly attended onsite location.

16. Change Section 5004.12 to read:

5004.12 Noncombustible floors. Except for surfacing, floors of storage areas shall remain noncombustible where required by the applicable building code.

17. Change Section 5004.13 to read:

5004.13 Weather protection. Where overhead noncombustible construction is provided for sheltering outdoor hazardous material storage areas, such storage shall not be considered indoor storage where the area is constructed in accordance with the requirements for weather protection as required by the applicable building code.

Exception: Storage of explosive materials shall be considered as indoor storage.

D. The following changes shall be made to Section 5005, Use, Dispensing, and Handling:

1. Change Sections 5005.1 and 5005.1.2 through 5005.1.9 to read:

5005.1 General. Use, dispensing, and handling of hazardous materials in amounts exceeding the maximum allowable quantity per control area shall be maintained in accordance with Sections 5001, 5003, and 5005 and the applicable building code. Use, dispensing, and handling of hazardous materials in amounts not exceeding the maximum allowable quantity per control area set forth in Section 5003.1 shall be maintained in accordance with Sections 5001 and 5003 and the applicable building code.

5005.1.2 Noncombustible floor. Except for surfacing, floors of areas where liquid or solid hazardous materials are dispensed or used in open systems shall be maintained as noncombustible and liquid-tight where required by the applicable building code.

5005.1.3 Spill control and secondary containment for hazardous material liquids. Where provided or required by the applicable building code, spill control and secondary containment for hazardous materials shall be maintained in accordance with Section 5004.2 and the applicable building code.

5005.1.4 Limit controls. Limit controls shall be maintained in accordance with Sections 5005.1.4.1 through 5005.1.4.4.

5005.1.4.1 High-liquid-level control. Where provided or required by the applicable building code, liquid-level limit controls or other approved means to prevent overfilling of open tanks shall be maintained.

5005.1.4.2 Low-liquid-level control. Where provided or required by the applicable building code, liquid-level limit controls or other approved means to prevent a low-liquid level in a tank from creating a hazardous condition, including overheating of a tank or its contents, shall be maintained.

5005.1.4.3 Temperature control. Where provided or required by the applicable building code, temperature controls shall be maintained in accordance with Section 5004.8.1.

5005.1.4.4 Pressure control. Where provided or required by the applicable building code, pressure controls shall be maintained in accordance with Section 5004.8.2.

5005.1.5 Standby or emergency power. Where mechanical ventilation, treatment systems, temperature control, alarm, detection, or other electrically operated systems are required to have emergency or standby power systems in accordance with the applicable building code, those power systems shall be operated and maintained in accordance with NFPA 70, Section 1203, and this chapter.

2. Delete Section 5005.1.5.1.

Change Sections 5005.1.6 through 5005.1.9 to read:

5005.1.6 Supervision and monitoring. Where emergency alarm, detection, and automatic fire-extinguishing systems are required by the applicable building code to be electrically supervised, they shall maintain monitoring by an approved supervising station or, when approved, sound an audible and visual signal at a constantly attended onsite location.

5005.1.7 Lighting. Natural or artificial lighting provided for use, dispensing, and handling of hazardous materials shall be maintained in accordance with this chapter, Chapter 6, and the applicable building code.

5005.1.8 Fire-extinguishing systems. Where fire-extinguishing systems for rooms or areas in which hazardous materials are dispensed or used are required by the applicable building code, they shall be maintained in

accordance with this chapter, Chapter 9, and the applicable building code.

5005.1.9 Ventilation. Where provided or required by the applicable building code, exhaust ventilation for indoor dispensing and use areas shall be operated and maintained in accordance with the applicable building code and Section 5004.3.

Exception: Ventilation is not required for dispensing and use of flammable solids other than finely divided particles.

3. Delete Sections 5005.1.11 and 5005.1.12.

4. Change Section 5005.2 to read:

5005.2 Indoor dispensing and use. Indoor dispensing and use of hazardous materials shall be in buildings complying with the International Building Code and in accordance with Section 5005.1, Sections 5005.2.1 through 5005.2.1.4, and Sections 5005.2.2.1 through 5005.2.2.4.

5. Change Section 5005.2.1.3 to read:

5005.2.1.3 Spill control for hazardous material liquids. Where spill control is provided in accordance with the applicable building code for buildings, rooms, or areas where hazardous material liquids are dispensed into vessels exceeding a 1.3-gallon (5 L) capacity or used in open systems exceeding a 5.3-gallon (20 L) capacity, spill control shall be maintained in accordance with this chapter.

6. Change Section 5005.2.1.4 to read:

5005.2.1.4 Secondary containment for hazardous material liquids. Where secondary containment is provided in accordance with the applicable building code for hazardous material liquids, it shall be maintained.

7. Delete Table 5005.2.1.4.

8. Change Section 5005.2.2 to read:

5005.2.2 Closed systems. Use of hazardous materials in closed containers or systems shall be in accordance with Sections 5005.2.2.1 through 5005.2.2.4.

9. Change Section 5005.2.2.1 through 5005.2.2.4 to read:

5005.2.2.1 Ventilation. Where closed systems are designed to be opened as part of normal operations, ventilation required by the applicable building code shall be operated and maintained in accordance with Section 5005.2.1.1.

5005.2.2.2 Explosion control. Where provided or required by the applicable building code, explosion control shall be maintained in accordance with Section 5004.6 where an explosive environment exists because of the hazardous materials dispensed or used or as a result of the dispensing or use process.

Exception: Where process vessels are designed to contain fully the worst-case explosion anticipated within the vessel under process conditions based on the most likely failure.

5005.2.2.3 Spill control for hazardous material liquids. Where provided in accordance with the applicable building code for buildings, rooms, or areas where hazardous material liquids are used in individual vessels exceeding a 55-gallon (208 L) capacity with the applicable building code, spill control shall be maintained in accordance with Section 5004.2.

5005.2.2.4 Secondary containment for hazardous material liquids. Where provided in accordance with the applicable building code, secondary containment for buildings, rooms, or areas where hazardous material liquids are used shall be maintained in accordance with Section 5004.2.2.

10. Change Section 5005.3.4 to read:

5005.3.4 Spill control for hazardous material liquids in open systems. Outdoor areas where hazardous material liquids are dispensed in vessels exceeding a 1.3-gallon (5 L) capacity or used in open systems exceeding a 5.3-gallon (20 L) capacity shall be provided with spill control in accordance with the applicable building code.

11. Change Section 5005.3.5 to read:

5005.3.5 Secondary containment for hazardous material liquids in open systems. Where required, outdoor areas where hazardous material liquids are dispensed or used in open systems shall be provided with secondary containment in accordance with the applicable building code where the capacity of an individual vessel or system or the capacity of multiple vessels or systems exceeds the following:

1. Individual vessel or system: greater than 1.3 gallons (5 L).

2. Multiple vessels or systems: greater than 5.3 gallons (20 L).

12. Change Section 5005.3.6 to read:

5005.3.6 Spill control for hazardous material liquids in closed systems. Outdoor areas where hazardous material liquids are used in closed systems exceeding 55 gallons (208 L) shall be provided with spill control in accordance with the applicable building code.

13. Change Section 5005.3.7 to read:

5005.3.7 Secondary containment for hazardous material liquids in closed systems. Where required, outdoor areas where hazardous material liquids are dispensed or used in closed systems shall be provided with secondary containment in accordance with the applicable building code where the capacity of an individual vessel or system or the capacity of multiple vessels or systems exceeds the following:

1. Individual vessel or system greater than 55 gallons (208 L).

2. Multiple vessels or systems greater than 1,000 gallons (3785 L).

14. Change Section 5005.3.9 to read:

5005.3.9 Weather protection. Where overhead noncombustible construction is provided for sheltering outdoor hazardous material use areas, such use shall not be considered indoor use where the area is constructed in accordance with the requirements for weather protection as required in the applicable building code.

Exception: Use of explosive materials shall be considered as indoor use.

15. Change Section 5005.4 to read:

5005.4 Handling. Handling of hazardous materials shall be maintained in accordance with Sections 5005.4.1 through 5005.4.4.

16. Change Section 5005.4.1 to read:

5005.4.1 Quantities exceeding the maximum allowable quantity per control area. Handling of hazardous materials in outdoor locations in amounts exceeding the maximum allowable quantity per the applicable building code shall be in accordance with Sections 5001, 5003, 5005.1, and 5005.4.

17. Change Section 5005.4.2 to read:

5005.4.2 Quantities not exceeding the maximum allowable quantity per control area. Handling of hazardous materials in indoor locations in amounts not exceeding the maximum allowable quantity per the applicable building code shall be in accordance with Sections 5001, 5003, and 5005.1. Handling of hazardous materials in outdoor locations in amounts not exceeding the maximum allowable quantity per Table 5003.1.1(3) and Table 5003.1.1(4) shall be in accordance with Sections 5001 and 5003.

18. Change Section 5005.4.4 to read:

5005.4.4 Dispensing, use, and handling. Hazardous materials having a hazard ranking of 3 or 4 in accordance with NFPA 704 shall not be transported through corridors, interior exit stairways or ramps, or exit passageways unless such areas maintain an emergency telephone system, a local manual alarm station, or an approved alarm-initiating device throughout the transport route in accordance with the applicable building code. Where required by the applicable building code, the signal shall be relayed to an approved central, proprietary, or remote station service or constantly attended onsite location and shall also initiate a local audible alarm.

13VAC5-52-490. IFC Chapter 51 Aerosols.

A. Change Section 5101.1 to read:

5101.1 Scope. The provisions of this chapter and NFPA 30B shall apply to the manufacturing, storage, and display of aerosol products. Manufacturing of aerosol products using hazardous materials shall also comply with Chapter 50.

B. Change Section 5101.2 to read:

5101.2 Permit required. Permits shall be required as set forth in Section 107.2.

C. Change Sections 5104.1, 5104.1.1, 5104.1.3.1, 5104.2, and 5104.2.2 to read:

5104.1 General. The inside storage of Level 2 and Level 3 aerosol products shall be maintained in accordance with Sections 5104.2 through 5104.7 and the applicable provisions of NFPA 30B and remain in accordance with the applicable building code.

5104.1.1 Plastic containers. Aerosol products in plastic containers larger than four fluid ounces (118 ml), but not to exceed 33.8 fluid ounces (1000 ml), shall be allowed only where in accordance with this section. The commodity classification shall be Class III commodities, as defined in the applicable NFPA 13 standard where any of the following conditions are met:

1. Base product has no fire point where tested in accordance with ASTM D 92, and nonflammable propellant.

2. Base product has no sustained combustion as tested in accordance with Appendix H, "Method of Testing for Sustained Combustibility," in U.S. Department of Transportation 49 CFR Part 173, and nonflammable propellant.

3. Base product contains up to 20% by volume (15.8% by weight) of ethanol, isopropyl alcohol, or both in an aqueous mix and nonflammable propellant.

4. Base product contains 4.0% by weight or less of an emulsified flammable liquefied gas propellant within an aqueous base. The propellant shall remain emulsified for the life of the product. Where such propellant is not permanently emulsified, the propellant shall be nonflammable.

5104.1.3.1 Storage, use, or handling. The storage, use, or handling of plastic aerosol X products shall be prohibited unless otherwise specified by the applicable building code.

5104.2 Storage in Groups A, B, E, F, I, and R. Storage quantities of Level 2 and Level 3 aerosol products in occupancies in Groups A, B, E, F, I, and R shall be limited and maintained in accordance with the applicable building code.

5104.2.2 Aerosol cooking spray products. Storage of aerosol cooking spray products in Groups A, B, E, F, and R occupancies shall not be more than 1,000 pounds (454 kg) net weight unless otherwise specified by the applicable building code.

D. Change Sections 5104.3 and 5104.3.1 to read:

5104.3 Storage in general purpose warehouses. Aerosol storage in general purpose warehouses utilized only for warehousing type operations involving mixed commodities shall be maintained in accordance with Section 5104.3.1 or 5104.3.2 and remain in accordance with the applicable building code.

5104.3.1 Nonsegregated storage. Nonsegregated storage areas shall be maintained in accordance with the applicable building code.

E. Delete Table 5104.3.1.

F. Change Section 5104.3.2 to read:

5104.3.2 Segregated storage. Segregated storage areas shall be maintained in accordance with the applicable building code.

G. Delete Table 5104.3.2.

H. Change Sections 5104.3.2.1 and 5104.3.2.2 to read:

5104.3.2.1 Chain link fence enclosures. Chain link fence enclosures shall be maintained in accordance with the applicable building code.

5104.3.2.2 Aisles. The minimum aisle requirements for solid pile or palletized segregated storage in general purpose warehouses shall be maintained in accordance with Table 5104.3.2.2 and remain in accordance with the applicable building code.

I. Delete the bottom two rows of Table 5104.3.2.2.

J. Change Sections 5104.3.3 through 5104.5 to read:

5104.3.3 Aerosol cooking spray products. Solid pile, palletized, or rack storage of aerosol cooking spray products in a general purpose warehouse shall not be more than 2,500 pounds (1135 kg) net weight unless protected in accordance with NFPA 30B or otherwise specified by the applicable building code.

5104.4 Storage in aerosol warehouses. The total quantity of Level 2 and Level 3 aerosol products in a warehouse utilized for the storage, shipping, and receiving of aerosol products shall not be restricted in structures complying with Sections 5104.4.1 through 5104.4.4.

5104.4.1 Automatic sprinkler system capability. Aerosol warehouses protected by an approved wet-pipe automatic sprinkler system in accordance with NFPA 30B and the applicable building code shall be maintained in accordance with Chapter 9. The highest classification level of aerosol product present shall not exceed the capability of the approved sprinkler system.

5104.4.2 Pile and palletized storage aisles. Solid pile and palletized storage shall be arranged so the maximum travel distance to an aisle is 25 feet (7620 mm). Aisles shall have a minimum width of four feet (1219 mm).

5104.4.3 Rack storage aisles. Rack storage shall be maintained in accordance with Chapter 32 and remain in accordance with the applicable building code.

5104.4.4 Combustible commodities. Combustible commodities other than flammable and combustible liquids shall be permitted to be stored in an aerosol warehouse.

Exception: Flammable and combustible liquids in one-quart (946 mL) metal containers and smaller shall be permitted to be stored in an aerosol warehouse.

5104.5 Storage in inside flammable liquid storage rooms. Inside flammable liquid storage rooms shall be maintained in accordance with Section 5704.3.7 unless otherwise approved by the applicable building code. The maximum quantities of aerosol products shall be maintained in accordance with the applicable code.

K. Delete Sections 5104.5.1 and 5104.5.2.

L. Change Sections 5104.6 and 5104.6.1 to read:

5104.6 Storage in liquid warehouses. The storage of Level 2 and Level 3 aerosol products in liquid warehouses shall be maintained in accordance with the applicable provisions of NFPA 30B. Unless otherwise approved by the applicable building code, the storage shall be maintained within segregated storage areas in accordance with Section 5104.3.2 and Sections 5104.6.1 through 5104.6.3.

5104.6.1 Containment. Spill control or drainage shall be maintained in accordance with the applicable building code.

5104.6.2 Sprinkler system. Sprinkler protection shall be maintained in accordance with Chapter 9.

5104.6.3 Opening protection into segregated storage areas. Fire doors or gates opening into the segregated storage area shall be maintained in accordance with Chapter 7 and remain in accordance with the applicable building code.

M. Change Section 5104.7 to read:

5104.7 Storage in Group M occupancies. Storage of Level 2 and Level 3 aerosol products in occupancies in Group M shall be maintained in accordance with the applicable building code. Retail display shall be maintained in accordance with Section 5106.

N. Delete Table 5104.7 and Sections 5104.8.1 and 5104.8.2.

O. Change Sections 5104.8, 5106.1, and 5106.2.1 to read:

5104.8 Storage of aerosol cooking spray products. Aerosol cooking spray products shall be permitted to be stored in a general purpose warehouse in accordance with the applicable building code.

5106.1 General. This section shall apply to the retail display of 500 pounds (227 kg) or more of Level 2 and Level 3 aerosol products and plastic Aerosol 3 products.

5106.2.1 Maximum quantities in retail display areas. Aerosol products in retail display areas shall not exceed quantities needed for display and normal merchandising and shall not exceed the quantities in the applicable building code.

P. Delete Table 5106.2.1.

Q. Change Sections 5106.2.2 and 5106.2.3 to read:

5106.2.2 Display of containers. Level 2 and Level 3 aerosol and plastic Aerosol 3 containers shall not be stacked more than six feet (1829 mm) high from the base of the aerosol array to the top of the aerosol array unless the containers are placed on fixed shelving or otherwise secured in an approved manner. When storage or retail display is on shelves, the height of such storage or retail display to the top of aerosol containers shall not exceed eight feet (2438 mm).

5106.2.3 Combustible cartons. Aerosol products located in retail display areas shall be removed from combustible cartons.

Exceptions:

1. Display areas that use a portion of combustible cartons that consist of only the bottom panel and not more than two inches (51 mm) of the side panel are allowed.

2. Where the display area is protected in accordance with Tables 6.3.2.7(a) through 6.3.2.7(l) of NFPA 30B, storage of aerosol products in combustible cartons is allowed.

R. Change Section 5106.2.4 to read:

5106.2.4 Retail display automatic sprinkler system. When an automatic sprinkler system is required for the protected retail display of aerosol products, the wet-pipe automatic sprinkler system shall be maintained in accordance with Chapter 9.

S. Change Sections 5106.2.5 through 1 5106.4 to read:

5106.2.5 Retail display automatic sprinkler system. Where an automatic sprinkler system is required for the protected retail display of aerosol products, the wet-pipe automatic sprinkler system shall be in accordance with the applicable NFPA 13 standard.

5106.3 Aerosol display and normal merchandising exceeding eight feet (2438 mm) high. Aerosol display and merchandising exceeding eight feet in height shall be maintained in accordance with Sections 5106.3.1 through 5106.3.3.

5106.3.1 Maximum quantities in retail display areas. Aerosol products in retail display areas shall not exceed quantities needed for display and normal merchandising and shall not exceed the quantities in the applicable building code.

5106.3.2 Automatic sprinkler protection. Where provided, automatic sprinkler protection for aerosol and plastic Aerosol 3 display and merchandising areas shall be maintained in accordance with the applicable building code.

5106.3.3 Separation of aerosol areas. Separation of aerosol and plastic Aerosol 3 areas shall be maintained in accordance with the applicable building code.

5106.4 Maximum quantities in storage areas. Aerosol and plastic Aerosol 3 products in storage areas adjacent to retail display areas shall not exceed the quantities approved under the applicable building code.

T. Delete Table 5106.4.

U. Change Sections 5106.5 through 5106.5.2 to read:

5106.5 Special protection design for Level 2 and Level 3 aerosols adjacent to flammable and combustible liquids in double-row racks. The display and merchandising of Level 2 and Level 3 aerosols adjacent to flammable and combustible liquids in double-row racks shall be maintained in accordance with Sections 5106.5.1 through 5106.5.8 or Section 5106.3.3.

5106.5.1 Fire protection. Fire protection for the display and merchandising of Level 2 and Level 3 aerosols in double-row racks shall be maintained in accordance with Chapter 9 and the applicable provisions of NFPA 30B.

5106.5.2 Cartoned products. Level 2 and Level 3 aerosols displayed or merchandised more than eight feet (2438 mm) above the finished floor shall be in cartons.

V. Change Sections 5106.5.3 through 5106.5.8 to read:

5106.5.3 Shelving. Shelving in racks shall be maintained in accordance with the applicable building code.

5106.5.4 Aisles. Aisles shall be maintained between rows of racks and adjacent solidly piled or palletized merchandise in accordance with the applicable building code.

5106.5.5 Flue spaces. Flue spaces in racks shall be maintained in accordance with the applicable building code.

5106.5.6 Horizontal barriers. Horizontal barriers shall be maintained in accordance with the applicable building code.

5106.5.7 Class I, Class II, Class III, Class IV, and plastic commodities. Class I, Class II, Class III, Class IV, and plastic commodities located adjacent to Level 2 and Level 3 aerosols and plastic Aerosol 3 shall maintain protection from an approved NFPA 13 sprinkler system where required in accordance with the applicable building code.

5106.5.8 Flammable and combustible liquids. Class I, Class II, Class III A, and Class III B liquids shall be allowed to be maintained adjacent to Level 2 and Level 3 aerosol products in accordance with the applicable building code.

W. Change Section 5107.1 to read:

5107.1 General. Manufacturing facilities shall be maintained in accordance with the applicable provisions of NFPA 30B and remain in accordance with the applicable building code.

13VAC5-52-500. IFC Chapter 53 Compressed Gases.

A. Change Section 5301.1 to read:

5301.1 Scope. Storage, use, and handling of compressed gases in compressed gas containers, cylinders, tanks, and systems shall comply with the applicable building code, this chapter, and the use and handling provisions of NFPA 55, including those gases regulated elsewhere in this code. Partially full compressed gas containers, cylinders, or tanks containing residual gases shall be considered as full for the purposes of the controls required.

Liquefied natural gas for use as a vehicular fuel shall also comply with NFPA 52 and NFPA 59A.

Compressed gases classified as hazardous materials shall also comply with Chapter 50 for general requirements and chapters addressing specific hazards, including Chapters 58 (Flammable Gases), 60 (Highly Toxic and Toxic Materials), 63 (Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluids), and 64 (Pyrophoric Materials).

Compressed hydrogen (CH_2) for use as a vehicular fuel shall also comply with Chapters 23 and 58 of this code and NFPA 2.

Cutting and welding gases shall also comply with Chapter 35.

LP-gas shall also comply with Chapter 61.

Exceptions:

1. Gases used as refrigerants in refrigeration systems (see Section 606).

2. Compressed natural gas (CNG) for use as a vehicular fuel shall comply with Chapter 23, NFPA 52, and the International Fuel Gas Code.

3. Cryogenic fluids shall comply with Chapter 55.

B. Change Section 5301.2 to read:

5301.2 Permits. Permits shall be required as set forth in Section 107.2.

C. Change Section 5303.16 to read:

5303.16 Vaults. Where approved by the applicable building code, generation, compression, storage, and dispensing equipment for compressed gases located in either above-grade or below-grade vaults shall be maintained in accordance with this section.

D. Delete Sections 5303.16.1 through 5303.16.3.

E. Delete Section 5303.16.5.

F. Delete Sections 5303.16.7 through 5303.16.10.

G. Delete Sections 5303.16.12 and 5303.16.14.

H. Change Sections 5305.5 and 5306.2 to read:

5305.5 Venting. Venting shall be operated, maintained, and directed to an approved location in accordance with this chapter and the applicable building code.

5306.2 Interior supply location. Unless otherwise approved by the applicable building code, medical gases shall be stored in areas dedicated to the storage of such gases without other storage or uses. Medical gases shall be stored in areas approved under the applicable building code.

I. Delete Sections 5306.2.1 and 5306.2.2.

J. Change Sections 5307.1 through 5307.4.5 to read:

5307.1 General. Compressed gases in storage or use not regulated by the material-specific provisions of Chapters 6, 54, 55, and 60 through 67, including asphyxiant, irritant, and radioactive gases, shall comply with this section in addition to other requirements of this chapter.

5307.2 Ventilation. Indoor storage and use areas and storage buildings shall be maintained with ventilation in accordance with Section 5004.3 and the applicable building code. Where mechanical ventilation is provided, the systems shall be operational during such time as the building or space is occupied.

5307.2.1 Gas detection system. In rooms or areas not operating with ventilation in accordance with Section 5307.2, a gas detection system, complying with the applicable building code or where approved by the building official, an oxygen depletion alarm system, either of which initiates audible and visible alarm signals in the room or area where sensors are installed, shall be maintained in accordance with Chapter 9.

5307.3 Insulated liquid carbon dioxide systems used in beverage dispensing applications. Insulated liquid carbon dioxide systems with more than 100 pounds (45.4 kg) of carbon dioxide used in beverage dispensing applications shall comply with Section 5307.3.1.

5307.3.1 Ventilation. Insulated liquid carbon dioxide storage tanks, cylinders, piping, and equipment located indoors, in rooms or areas containing storage tanks, cylinders, piping, and equipment and in other areas where a leak of carbon dioxide is expected to accumulate, shall maintain and operate ventilation in accordance with the applicable building code and Section 5004.3 and keep the room containing carbon dioxide at a negative pressure in relation to the surrounding area.

Exception: Where a gas detection system was approved in accordance with the applicable building code.

5307.3.2 Gas detection system. Gas detection systems for insulated carbon dioxide systems shall be maintained in accordance with the applicable building code.

5307.4 Carbon dioxide enrichment systems. The maintenance of carbon dioxide enrichment systems with more than 100 pounds (45.4 kg) of carbon dioxide and carbon dioxide enrichment systems with any quantity of carbon dioxide having a remote fill connection shall comply with Sections 5307.4.1 through 5307.4.7.

5307.4.1 Documentation. Where required by the fire code official for an operational permit in accordance with Section 107.2, the following shall be provided:

1. Total aggregate quantity of liquid carbon dioxide in pounds or cubic feet at normal temperature and pressure.

2. Location and total volume of the room where the carbon dioxide enrichment operation will be conducted. Identify whether the room is at grade or below grade.

3. Location of containers relative to equipment, building openings, and means of egress.

4. Manufacturer's specifications and pressure rating, including cut sheets, of all piping and tubing to be used.

5. A piping and instrumentation diagram that shows piping support and remote fill connections.

6. Details of container venting, including vent line size, material, and termination location.

7. Alarm and detection system and equipment, if applicable.

8. Seismic support for containers.

5307.4.2 Equipment. Pressure relief, vent piping, fill indicators, fill connections, vent terminations, piping systems, and the storage, use, and handling of the carbon dioxide shall be maintained in accordance with Chapter 53, the applicable building code, and the applicable maintenance provisions of NFPA 55.

5307.4.3 Gas detection system. Gas detection systems for carbon dioxide enrichment systems shall be maintained in accordance with the applicable building code.

5307.4.3.1 System activation. System activation shall be maintained in accordance with the applicable building code.

5307.4.4 Pressurization and ventilation. Rooms or indoor areas in which carbon dioxide enrichment is provided shall be operated and maintained at a negative pressure in relation to the surrounding areas in the building in accordance with the applicable building code.

5307.4.5 Signage. Hazard identification signs shall be posted at the entrance to the room and indoor areas where the carbon dioxide enrichment process is located and at the entrance to the room or indoor area where the carbon dioxide containers are located. The sign shall be not less than eight inches (200 mm) in width and six inches (150 mm) in height and indicate:

CAUTION - CARBON DIOXIDE GAS

VENTILATE THE AREA BEFORE ENTERING.

A HIGH CARBON DIOXIDE (CO_2) GAS CONCENTRATION IN THIS AREA CAN CAUSE ASPHYXIATION.

13VAC5-52-510. IFC Chapter 54 Corrosive Materials.

A. Change Sections 5401.1 and 5401.2 to read:

5401.1 Scope. Maintenance and operational aspects of the storage and use of corrosive materials shall be in accordance with this chapter. Compressed gases shall also comply with Chapter 53.

Exceptions:

1. Display and storage in Group M and storage in Group S occupancies complying with Section 5003.11.

2. Stationary storage battery systems in accordance with Section 1206.5.

3. This chapter shall not apply to R-717 (ammonia) where used as a refrigerant in a refrigeration system (see Section 608).

5401.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Sections 5403.1 and 5403.2 to read:

5403.1 Quantities not exceeding the maximum allowable quantity per control area. The storage and use of corrosive materials in amounts not exceeding the maximum allowable quantity per the applicable building code shall be maintained in accordance with Sections 5001, 5003, and 5401.

5403.2 Quantities exceeding the maximum allowable quantity per control area. The storage and use of corrosive materials in amounts exceeding the maximum allowable quantity per the applicable building code shall be maintained in accordance with this chapter and Chapter 50.

C. Change Sections 5404.1.1 and 5404.2.1 to read:

5404.1.1 Liquid-tight floor. In addition to the provisions of Section 5004.12, floors in storage areas for corrosive liquids shall be maintained as liquid-tight construction in accordance with the applicable building code.

5404.2.1 Aboveground outside storage tanks. Where secondary containment is provided for aboveground outside storage tanks of corrosive liquids, secondary containment shall be maintained in accordance with Section 5004.2.2.

D. Change Section 5405.1.2 to read:

5405.1.2 Ventilation. Where required, mechanical exhaust ventilation shall be maintained and operated in accordance with the applicable building code.

13VAC5-52-520. IFC Chapter 55 Cryogenic Fluids.

A. Change Sections 5501.1 and 5501.2 to read:

5501.1 Scope. Maintenance and operational aspects of the storage, use, and handling of cryogenic fluids shall comply with this chapter and NFPA 55. Cryogenic fluids classified as hazardous materials shall also comply with the general requirements of Chapter 50. Partially full containers containing residual cryogenic fluids shall be considered as full for the purposes of the controls required.

Exceptions:

1. Fluids used as refrigerants in refrigeration systems (see Section 608).

2. Liquefied natural gas (LNG), which shall comply with NFPA 59A.

Oxidizing cryogenic fluids, including oxygen, shall comply with Chapter 63, as applicable.

Flammable cryogenic fluids, including hydrogen, methane, and carbon monoxide, shall comply with Chapters 23 and 58, as applicable.

Inert cryogenic fluids, including argon, helium, and nitrogen, shall comply with ANSI/CGA P-18.

5501.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 5503.1.2 to read:

5503.1.2 Concrete containers. Barrier materials and membranes used in connection with concrete, but not functioning structurally, shall be compatible with the materials contained.

C. Change Sections 5503.5.2 and 5503.6 to read:

5503.5.2 Securing of containers. Stationary containers shall be secured to foundations in accordance with the applicable building code. Portable containers subject to shifting or upset shall be secured. Nesting shall be an acceptable means of securing containers.

5503.6 Electrical wiring and equipment. Electrical wiring and equipment shall be maintained in accordance with the applicable provisions of NFPA 70, the applicable building code, and Sections 5503.6.1 and 5503.6.2.

D. Change Section 5504.2.1 to read:

5504.2.1 Stationary containers. Stationary containers shall remain in accordance with the applicable building code and comply with the maintenance provisions of this section and those applicable to the type of fluid stored.

E. Change Section 5504.2.1.2 to read:

5504.2.1.2 Indoor storage areas. Cryogenic fluids in stationary containers stored indoors shall be stored in buildings, rooms, or areas constructed for this use in accordance with the applicable building code.

F. Change Sections 5504.2.1.3, 5504.2.2.2, and 5504.2.2.3 to read:

5504.2.1.3 Ventilation. Storage areas for stationary containers shall be ventilated in accordance with the applicable building code.

5504.2.2.2 Indoor storage areas. Cryogenic fluids in portable containers stored indoors shall only be stored in buildings, rooms, or areas constructed for this use in accordance with the applicable building code.

5504.2.2.3 Ventilation. Storage areas for portable containers shall be ventilated in accordance with the applicable building code.

G. Change Sections 5505.4.1 and 5505.4.1.1 to read:

5505.4.1 Dispensing areas. Dispensing of cryogenic fluids with physical or health hazards shall be conducted in approved locations.

5505.4.1.1 Ventilation. Ventilation required by the applicable building code shall be maintained and operated in areas where cryogenic fluids are dispensed.

Exception: Cryogenic fluids that can be demonstrated not to create harmful vapors.

13VAC5-52-530. IFC Chapter 56 Explosives and Fireworks.

A. Change Exception 4 in Section 5601.1 to read:

4. The possession, storage, and use of not more than 15 pounds (6.81 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder, and any amount of small arms primers for hand loading of small arms ammunition for personal consumption.

B. Add Exceptions 10, 11, and 12 to Section 5601.1 to read:

10. The storage, handling, or use of explosives or blasting agents pursuant to the provisions of Title 45.1 of the Code of Virginia.

11. The display of small arms primers in Group M when in the original manufacturer's packaging.

12. The possession, storage, and use of not more than 50 pounds (23 kg) of commercially manufactured sporting black powder, 100 pounds (45 kg) of smokeless powder, and small arms primers for hand loading of small arms ammunition for personal consumption in Group R-3 or Group R-5, or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures at least 10 feet (3048 mm) from inhabited buildings and are accessory to Group R-3 or Group R-5.

C. Change Exception 4 in Section 5601.1.3 to read:

4. The possession, storage, sale, handling, and use of permissible fireworks where allowed by applicable local or state laws, ordinances, and regulations, provided such fireworks comply with CPSC 16 CFR Parts 1500-1507 and DOTn 49 CFR Parts 100-178 for consumer fireworks.

D. Add Exception 5 to Section 5601.1.3 to read:

5. The sale or use of materials or equipment when such materials or equipment is used or to be used by any person for signaling or other emergency use in the operation of any boat, railroad train, or other vehicle for the transportation of persons or property.

E. Change entire Section 5601.2 to read:

5601.2 Permit required. Permits shall be required as set forth in Section 107.2 and regulated in accordance with this section. The manufacture, storage, possession, sale, and use of fireworks or explosives shall not take place without first applying for and obtaining a permit.

5601.2.1 Residential uses. No person shall keep or store, and no permit may be issued to keep, possess, or store any fireworks or explosives at any place of habitation or within 100 feet (30,480 mm) thereof.

Exception: Storage of smokeless propellant, black powder, and small arms primers for personal use and not for resale in accordance with Section 5606.

5601.2.2 Sale and retail display. Except for the Armed Forces of the United States, Coast Guard, and National Guard; federal, state, and local regulatory; law-enforcement and fire agencies acting in their official capacities, explosives shall not be sold, given, delivered, or transferred to any person or company not in possession of a valid permit. The holder of a permit to sell explosives shall make a record of all transactions involving explosives in conformance with Section 5603.2 and include the signature of any receiver of the explosives. No person shall construct a retail display, and no person may offer for sale explosives, explosive materials, or fireworks upon highways, sidewalks, public property, or in assembly or educational occupancies.

5601.2.2.1 Permissible fireworks. Where the sale or retail display of permissible fireworks is allowed by Section 5601.1.3, Exception 4, such sales or retail display shall comply with the applicable requirements of NFPA 1124 - 06 edition.

5601.2.3 Permit restrictions. The fire official is authorized to limit the quantity of explosives, explosive materials, or fireworks permitted at a given location. No person possessing a permit for storage of explosives at any place shall keep or store an amount greater than authorized in such permit. Only the kind of explosive specified in such a permit shall be kept or stored.

5601.2.3.1 Permit applicants. As a condition of a permit as provided for in Section 107.5, the fire official shall not issue a permit to manufacture, store, handle, use, or sell explosives or blasting agents to any applicant who has not provided on the permit application the name and signature of a designated individual as representing the applicant. When, as provided for in Section 107.2 or 107.6, a permit is required to conduct a fireworks display, as a condition of permit as provided for in Section 107.5, the fire official shall not issue a permit to design, setup, or conduct a fireworks display to any applicant who has not provided on the permit application the name and signature of a designated individual as representing the applicant.

If the applicant's designated individual changes or becomes no longer qualified to represent the applicant as responsible management or designated individual, the applicant shall notify the fire official who issued the permit on the change of status of the designated individual. The notice is to be made prior to the use of any explosives or the conducting a fireworks display, but in no case shall the notification occur more than seven days after the change of status and shall provide the name of another designated individual. The fire official may revoke or require the reissuance of a permit based on a change of permit conditions or status or inability to provide another designated individual.

5601.2.3.1.1 Background clearance card (BCC). The SFMO shall process all applications for a BCC for compliance with § 27-97.2 of the Code of Virginia and will be the sole provider of a BCC. Using forms provided by the SFMO, a BCC may be applied for and issued to any person who submits to the completion of a background investigation by providing fingerprints and personal descriptive information to the SFMO. The SFMO shall forward the fingerprints and personal descriptive information to the Central Criminal Records Exchange for submission to the Federal Bureau of Investigation for the purpose of obtaining a national criminal history records check regarding such applicant.

5601.2.3.1.2 Issuance of a BCC. The issuance of a BCC shall be denied if the applicant or designated person representing an applicant has been convicted of any felony, whether such conviction occurred under the laws of the Commonwealth or any other state, the District of Columbia, the United States, or any territory thereof, unless the applicant's civil rights have been restored by the Governor or other appropriate authority.

5601.2.3.1.3 Fee for BCC. The fee for obtaining or renewing a BCC from the SFMO shall be $150 plus any additional fees charged by other agencies for fingerprinting and for obtaining a national criminal history record check through the Central Criminal Records Exchange to the Federal Bureau of Investigation.

5601.2.3.1.4 Revocation of a BCC. After issuance of a BCC, subsequent conviction of a felony will be grounds for

immediate revocation of a BCC, whether such conviction occurred under the laws of the Commonwealth or any other state, the District of Columbia, the United States, or any territory thereof. The BCC shall be returned to the SFMO immediately. An individual may reapply for a BCC if the individual's civil rights have been restored by the Governor or other appropriate authority.

5601.2.4 Financial responsibility. Before a permit is issued, as required by Section 5601.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of $500,000 or a public liability insurance policy for the same amount for the purpose of the payment of all damages to persons or property that arise from or are caused by the conduct of any act authorized by the permit upon which any judicial judgment results. The legal department of the jurisdiction may specify a greater amount when conditions at the location of use indicate a greater amount is required. Government entities shall be exempt from this bond requirement.

5601.2.4.1 Blasting. Before approval to do blasting is issued, the applicant for approval shall file a bond or submit a certificate of insurance in such form, amount, and coverage as determined by the legal department of the jurisdiction to be adequate in each case to indemnify the jurisdiction against any and all damages arising from permitted blasting, but in no case shall the value of the coverage be less than $1 million.

Exception: Filing a bond or submitting a certificate of liability insurance is not required for blasting on real estate parcels of five or more acres conforming to the definition of "real estate devoted to agricultural use" or "real estate devoted to horticultural use" in § 58.1-3230 of the Code of Virginia and conducted by the owner of such real estate.

5601.2.4.2 Fireworks display. The permit holder shall furnish a bond or certificate of insurance in an amount deemed adequate by the legal department of the jurisdiction for the payment of all potential damages to a person or to property by reason of the permitted display, and arising from any acts of the permit holder, the agent, employees, or subcontractors, but in no case shall the value of the coverage be less than $1 million.

F. Change entire Section 5601.4 to read:

5601.4 Qualifications. Persons in charge of magazines, blasting, fireworks display, or pyrotechnic special effect operations shall not be under the influence of alcohol or drugs that impair sensory or motor skills, shall be at least 21 years of age, and shall possess knowledge of all safety precautions related to the storage, handling, or use of explosives, explosive materials, or fireworks.

5601.4.1 Certification of blasters and pyrotechnicians. Certificates as a restricted blaster, unrestricted blaster, or pyrotechnician will be issued upon proof of successful completion of an examination approved by the SFMO commensurate to the certification sought and completion of a background investigation for compliance with § 27-97.2 of the Code of Virginia. The applicant for certification shall submit proof to the SFMO of the following experience:

1. For certification as a restricted blaster, at least one year under direct supervision by a certified unrestricted blaster, certified restricted blaster, or other persons approved by the SFMO.

2. For certification as an unrestricted blaster, at least one year under direct supervision by a certified unrestricted blaster or an other person approved by the SFMO.

3. For certification as a pyrotechnician, aerial or pyrotechnician, proximate, the applicant must have been in responsible charge of or has assisted in the documented design, setup, and conducting of a fireworks display on at least six occasions within the 24 months immediately preceding the application for certification.

The SFMO shall process all certification applicants for compliance with § 27-97.2 of the Code of Virginia and will be the sole provider of blaster and pyrotechnician certifications.

Exception: The use of explosives by the owner of real estate parcels of five or more acres conforming to the definition of "real estate devoted to agricultural use" or "real estate devoted to horticultural use" in § 58.1-3230 of the Code of Virginia when blasting on such real estate.

5601.4.2 Certification issuance. The issuance of a certification as a blaster or pyrotechnician shall be denied if the applicant (i) has been convicted of any felony, whether such conviction occurred under the laws of the Commonwealth or any other state, the District of Columbia, the United States, or any territory thereof, unless the applicant's civil rights have been restored by the Governor or other appropriate authority; (ii) has not provided acceptable proof or evidence of the experience required in Section 5601.4.1; or (iii) has not provided acceptable proof or evidence of the continued training or education required in Section 5601.4.5.

5601.4.3 Fee for certification. The fee for obtaining or renewing a blaster or pyrotechnician certificate from the SFMO shall be $150 plus any additional fees charged by other agencies for fingerprinting and for obtaining a national criminal history record check through the Central Criminal Records Exchange to the Federal Bureau of Investigation.

5601.4.3.1 Fee for replacement certificate. A written request for a replacement blaster or pyrotechnician certificate shall be accompanied by the payment of an administrative fee in the amount of $20 made payable to the Treasurer of Virginia. Verbal requests shall not be accepted.

5601.4.4 Revocation of a blaster or pyrotechnician certification. After issuance of a blaster or pyrotechnician

certification, subsequent conviction of a felony will be grounds for immediate revocation of a blaster or pyrotechnician certification, whether such conviction occurred under the laws of the Commonwealth or any other state, the District of Columbia, the United States, or any territory thereof. The certification shall be returned to the SFMO immediately. An individual may subsequently reapply for the blaster or pyrotechnician certification if the individual's civil rights have been restored by the Governor or other appropriate authority.

5601.4.5 Expiration and renewal of a BCC or blaster or pyrotechnician certification. A certificate for an unrestricted blaster, restricted blaster, or pyrotechnician shall be valid for three years from the date of issuance. A BCC shall be valid for three years from the date of issuance. Renewal of the unrestricted blaster certificate will be issued upon proof of at least 16 accumulated hours of continued training or education in the use of explosives within three consecutive years and a background investigation for compliance with § 27-97.2 of the Code of Virginia. Renewal of the restricted blaster certificate will be issued upon proof of at least eight accumulated hours of continued training or education in the use of explosives within three consecutive years and a background investigation for compliance with § 27-97.2 of the Code of Virginia. Renewal of the pyrotechnician certificate will be issued upon proof of at least 12 accumulated hours of continued training or education in the subject areas of explosives storage; the design, setup, or conduct of a fireworks display within three consecutive years; and a background investigation for compliance with § 27-97.2 of the Code of Virginia. The continued training or education required for renewal of a blaster or pyrotechnician certificate shall be obtained during the three years immediately prior to the certificate's published expiration date. Failure to renew a blaster or pyrotechnician certificate in accordance with this section shall cause an individual to obtain another blaster or pyrotechnician certificate upon compliance with Section 5601.4.1 to continue engaging in the unsupervised use of explosives or conducting a fireworks display.

5601.4.6 Denial, suspension or revocation of a certificate. If issuance or renewal of a blaster or pyrotechnician certificate is denied, or upon the filing of a complaint against an applicant or certificate holder for non-performance, or performance in violation of the SFPC and the appropriate referenced NFPA 495, 1123 or 1126 standards, the State Fire Marshal may convene a three-member panel to hear the particulars of the complaint or denial. The three-member panel will be comprised of the following persons:

1. A Virginia certified fire official, excluding any person certified as a blaster or pyrotechnician, or who is on the staff of the SFMO.

2. A Virginia certified blaster or pyrotechnician whose certification is the same as that of the person to whom a complaint is lodged and who is not associated in any way with the person against whom a complaint is lodged and whose work or employer is geographically remote, as much as practically possible, from the person to whom a complaint is lodged.

3. A member of the general public who does not have a vested financial interest in conducting a fireworks display or the manufacture, sale, storage, or use of explosives.

Upon the State Fire Marshal convening such panel, the hearing is to commence within 60 calendar days of the filing of the complaint or denial. The three-member panel is to hear the complaint and render a written recommendation to the State Fire Marshal for certificate issuance, no action, revocation, or suspension of a certificate for a period not to exceed six months. Notwithstanding the discretionary decision and action to convene such panel, the State Fire Marshal reserves the authority to choose an action that may be contrary to the panel's recommendation. A written decision of the State Fire Marshal is to be delivered to the party within 14 days of the hearing's conclusion. If the certificate is denied, revoked, or suspended by the SFMO, in accordance with Section 112.9, the party may file an appeal with the State Review Board. The party's appeal to State Review Board must be filed within 14 calendar days of the receipt of the State Fire Marshal's written decision to deny, revoke, or suspend. The denial, revocation, or suspension of a license is independent of any criminal proceedings that may be initiated by any state or local authority.

5601.4.6.1 Replacement of revoked certificate. Any person whose certificate as a pyrotechnician or blaster was revoked upon cause may apply for certification as a pyrotechnician or blaster six months or more from the date of the revocation and upon compliance with Section 5601.4.1. All elements of Section 5601.4.1 are required to be obtained and dated after the date of revocation.

5601.4.6.2 Return of suspended certificate. Any certificate that was suspended upon cause will be reinstated at the end of the suspension period without change to its expiration date.

G. Change Section 5601.7 to read:

5601.7 Seizure. The fire official is authorized to remove or cause to be removed or disposed of in an approved manner at the expense of the owner fireworks offered or exposed for sale, stored, possessed, or used in violation of this chapter.

H. Change Section 5601.8.1.1 to read:

5601.8.1.1 Mass-detonating explosives (Division 1.1, 1.2, or 1.5). The total net explosive weight of mass-detonating explosives (Division 1.1, 1.2, or 1.5) shall be used. See Table 5604.5.2(1) as appropriate.

Exception: Where the TNT equivalence of the explosive material has been determined, the equivalence is allowed to be used to establish the net explosive weight.

I. Change Section 5601.8.1.3 to read:

5601.8.1.3 Combinations of mass-detonating and non-mass-detonating explosives (excluding Division 1.4). Combination of mass-detonating and non-mass-detonating explosives (excluding Division 1.4) shall be as follows:

1. Where Divisions 1.1 and 1.2 explosives are located in the same site, determine the distance for the total quantity considered first as Division 1.1 and then as Division 1.2. The required distance is the greater of the two. When the Division 1.1 requirements are controlling and the TNT equivalence of the Division 1.2 is known, the TNT equivalent weight of the 1.2 items shall be allowed to be added to the total explosive weight of Division 1.1 items to determine the net explosive weight for Division 1.1 distance determination. See Table 5604.5.2(2) or Table 5605.3 as appropriate.

2. Where Divisions 1.1 and 1.3 explosives are located in the same site, determine the distances for the total quantity considered first as 1.1 and then as 1.3. The required distance is the greater of the two. When the Division 1.1 requirements are controlling and the TNT equivalence of the 1.3 is known, the TNT equivalent weight of the 1.3 items shall be allowed to be added to the total explosive weight of Division 1.1 items to determine the net explosive weight for Division 1.1 distance determination. See Table 5604.5.2(1) or Table 5604.5.2(2) or 5605.3, as appropriate.

3. Where Divisions 1.1, 1.2, and 1.3 explosives are located in the same site, determine the distances for the total quantity considered first as 1.1, next as 1.2, and finally as 1.3. The required distance is the greatest of the three. As allowed by subdivisions 1 and 2 of this subsection, TNT equivalent weights for 1.2 and 1.3 items are allowed to be used to determine the net weight of explosives for Division 1.1 distance determination. Table 5604.5.2(1) or 5605.3 shall be used when TNT equivalency is used to establish the net explosive weight.

4. For composite pyrotechnic items Division 1.1 and Division 1.3, the sum of the net weights of the pyrotechnic composition and the explosives involved shall be used. See Tables 5604.5.2(1) and 5604.5.2(2).

J. Add the following to the list of definitions in Section 5602.1:

Background clearance card (BCC).

Blaster, restricted.

Blaster, unrestricted.

Design.

Designated individual.

Permissible fireworks.

Pyrotechnician (fireworks operator).

Pyrotechnician, aerial.

Pyrotechnician, proximate.

Responsible management.

Sole proprietor.

K. Change Section 5603.4 to read:

5603.4 Accidents. Accidents involving the use of explosives, explosive materials, and fireworks that result in injuries or property damage shall be immediately reported by the permit holder to the fire code official and State Fire Marshal.

L. Change Section 5605.1 to read:

5605.1 General. The restricted and unrestricted manufacture, assembly, and testing of explosives, ammunition, blasting agents, and fireworks shall comply with the requirements of this section, NFPA 495, NFPA 1124, or NFPA 1126.

Exceptions:

1. The hand loading of small arms ammunition prepared for personal use and not offered for resale.

2. The mixing and loading of blasting agents at blasting sites in accordance with NFPA 495.

3. The use of binary explosives or phosphoric materials in blasting or pyrotechnic special effects applications in accordance with NFPA 495 or NFPA 1126.

M. Add Section 5605.1.1 to read:

5605.1.1 Permits. Permits for the restricted and unrestricted explosives manufacture, assembly, and testing of explosives, ammunition, blasting agents, and fireworks shall be required as set forth in Section 107.2 and regulated in accordance with this section. A permit for unrestricted explosives manufacturing of any explosive material shall be prohibited unless such manufacture is authorized by a federal license and conducted in accordance with recognized safety practices. All restricted explosives manufacturing shall comply with the instructions provided by the supplier of the components used in the manufacture of the explosive material.

Exceptions:

1. Any recreational use of reactive targets is not required to obtain a permit for restricted explosives manufacture or explosives use when such manufacture and use complies with all of the following:

1.1. The manufacture and use is limited to one pound or less per unit on private property with the permission of the

property owner and used no closer than 500 feet from a roadway or structure;

1.2. The manufacture of the reactive target complies with the instructions provided by the producer of the components used in the manufacture;

1.3. The reactive target manufactured is for immediate use without any residual storage or transportation; and

1.4. The exploding or use of the target is in conformance with its intended purpose by the manufacturer of the reactive target and does not involve the deliberate destruction of any property, vehicle, structure, or animal life.

2. The owner of real estate parcels of five or more acres conforming to the definition of "real estate devoted to agricultural use" or "real estate devoted to horticultural use" in § 58.1-3230 of the Code of Virginia is not required to obtain a permit for restricted explosives manufacture when such manufacture complies with all of the following:

2.1. The manufacture of the explosives is conducted by the owner of such real estate;

2.2. The manufacture of the explosives complies with the instructions provided by the producer of the components used in the manufacture;

2.3. The explosive used does not include reactive targets;

2.4. The reactive target manufactured is for immediate use without any residual storage or transportation; and

2.5. A permit to use explosives has been obtained in accordance with Section 107.2.

3. An applicant that is performing nonpersonal, business work is not required to obtain a permit for restricted explosives manufacture when such manufacture complies with all of the following:

3.1. The applicant's certified blaster who manufactures the explosives complies with the instructions provided by the producer of the components used in the manufacture;

3.2. The explosive used does not include the use of reactive targets;

3.3. The explosive material manufactured is for immediate use without any residual storage or transportation; and

3.4. A permit to use explosives has been obtained in accordance with Section 107.2.

N. Delete Table 5605.3 and change Section 5605.3 to read:

5605.3 Intraplant separation of operating buildings. Separation of explosives manufacturing buildings and fireworks manufacturing buildings, including those where explosive charges are assembled, manufactured, prepared, or loaded utilizing Division 1.1, 1.2, 1.3, 1.4, or 1.5 explosives shall be separated from all other buildings, including magazines, within the confines of the manufacturing plant at a distance not less than that required by the applicable building code or Table 5604.5.2(3), as applicable. The quantity of explosives in an operating building shall be the net weight of all explosives contained therein.

O. Change Section 5605.4 to read:

5605.4 Separation of manufacturing operating buildings from inhabited buildings, public traffic routes, and magazines. Where an operating building on an explosive materials plant site is designed to contain explosive materials, the distance between such a building and inhabited buildings, public traffic routes, and magazines required by the applicable building code shall be maintained.

P. Change Section 5605.5 to read:

5605.5 Buildings and equipment. Buildings or rooms that exceed the maximum allowable quantity per control area of explosive materials in accordance with the applicable building code shall be operated in accordance with this section and maintain the requirements of the applicable building code for Group H occupancies.

Q. Change Section 5605.6.4 to read:

5605.6.4 Quantity limits. The quantity of explosives at any particular work station shall be limited to that posted on the load limit signs for the individual work station. The total quantity of explosives for multiple workstations shall not exceed that established by the intraplant distances in Table 5604.5.2(3) and the applicable building code.

R. Change Section 5605.6.4.1 to read:

5605.6.4.1 Magazines. Magazines used for storage in processing areas shall be in accordance with the requirements of Section 5604.5.1. All explosive materials shall be removed to appropriate storage magazines for unattended storage at the end of the work day. The contents of indoor magazines shall be added to the quantity of explosives contained at individual workstations, and the total quantity of material stored, processed, or used shall be utilized to establish the intraplant separation distances indicated by Table 5605.3 or Table 5604.5.2(3) as appropriate.

S. Change Section 5606.4 to read:

5606.4 Storage in residences. Propellants for personal use in quantities not exceeding 50 pounds (23 kg) of black powder or 100 pounds (45 kg) of smokeless powder shall be stored in original containers in occupancies limited to Group R-3 and Group R-5, or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures that are at least 10 feet from inhabited buildings and are accessory to Group R-3 or Group R-5. In other than Group R-3 or Group R-5, smokeless powder in quantities exceeding 20 pounds (9 kg) but not exceeding 50 pounds (23 kg) shall be kept in a wooden box

or cabinet having walls of at least one inch (25 mm) nominal thickness or equivalent.

T. Delete Sections 5606.4.1, 5606.4.2, and 5606.4.3.

U. Change Section 5606.5.1.1 to read:

5606.5.1.1 Smokeless propellant. No more than 100 pounds (45 kg) of smokeless propellants in containers of eight pounds (3.6 kg) or less capacity shall be displayed in Group M occupancies.

V. Delete Section 5606.5.1.3.

W. Change Section 5606.5.2.1 to read:

5606.5.2.1 Smokeless propellant Commercial stocks of smokeless propellants shall be stored as follows:

1. Quantities exceeding 20 pounds (9 kg), but not exceeding 100 pounds (45 kg), shall be stored in portable wooden boxes having walls of at least one inch (25 mm) nominal thickness or equivalent.

2. Quantities exceeding 100 pounds (45 kg), but not exceeding 800 pounds (363 kg), shall be stored in storage cabinets having walls at least one inch (25 mm) nominal thickness or equivalent. Not more than 400 pounds (182 kg) shall be stored in any one cabinet, and cabinets shall be separated by a distance of at least 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of at least one hour.

3. Storage of quantities exceeding 800 pounds (363 kg), but not exceeding 5,000 pounds (2270 kg), in a building shall comply with all of the following:

3.1. The storage is inaccessible to unauthorized personnel.

3.2. Smokeless propellant shall be stored in nonportable storage cabinets having wood walls at least one inch (25 mm) nominal thickness or equivalent and having shelves with no more than three feet (914 mm) of vertical separation between shelves.

3.3. No more than 400 pounds (182 kg) is stored in any one cabinet.

3.4. Cabinets shall be located against walls with at least 40 feet (12,192 mm) between cabinets. The minimum required separation between cabinets may be reduced to 20 feet (6096 mm), provided that barricades twice the height of the cabinets are attached to the wall midway between each cabinet. The barricades must extend a minimum of 10 feet (3048 mm) outward, be firmly attached to the wall, and be constructed of steel not less than 0.25 inch thick (6.4 mm), two-inch (51 mm) nominal thickness wood, brick, or concrete block.

3.5. Smokeless propellant shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids, or oxidizing materials by a distance of 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of one hour.

3.6. The building shall be equipped throughout with an automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

4. Smokeless propellants not stored according to Item 1, 2, or 3 shall be stored in a Type 2 or Type 4 magazine in accordance with Section 5604 and NFPA 495.

X. Change Section 5606.5.2.3 to read:

5606.5.2.3 Small arms primers. Commercial stocks of small arms primers shall be stored as follows:

1. Quantities not to exceed 750,000 small arms primers stored in a building shall be arranged such that not more than 100,000 small arms primers are stored in any one pile, and piles are not less than 15 feet (4572 mm) apart.

2. Quantities exceeding 750,000 small arms primers stored in a building shall comply with all of the following:

2.1. The warehouse or storage building is not open to unauthorized personnel.

2.2. Small arms primers shall be stored in cabinets. Not more than 200,000 small arms primers shall be stored in any one cabinet.

2.3. Shelves in cabinets shall have vertical separation of not less than two feet (610 mm).

2.4. Cabinets shall be located against walls of the warehouse or storage room with not less than 40 feet (12,192 mm) between cabinets. The minimum required separation between cabinets shall be allowed to be reduced to 20 feet (6096 mm), provided that barricades twice the height of the cabinets are attached to the wall midway between each cabinet. The barricades shall be firmly attached to the wall and shall be constructed of steel not less than 1/4-inch thick (6.4 mm), two-inch (51 mm) nominal thickness wood, brick, or concrete block.

2.5. Small arms primers shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids, or oxidizing materials by a distance of 25 feet (7620 mm) by a fire partition having a fire-resistance rating of one hour.

2.6. The building shall be protected throughout with an automatic sprinkler system installed in accordance with the applicable NFPA 13 standard.

3. Small arms primers not stored in accordance with Item 1 or 2 of this section shall be stored in a magazine meeting the requirements of Section 5604 and NFPA 495.

Y. Change Section 5607.1 to read:

5607.1 General. Blasting operations shall be conducted only by persons certified by the SFMO as a restricted or unrestricted blaster or shall be supervised onsite by a person properly certified by the SFMO as a restricted or unrestricted blaster.

Z. Add Section 5607.16 to read:

5607.16 Blast records. A record of each blast shall be kept and retained for at least five years and shall be readily available for inspection by the code official. The record shall be in a format selected by the blaster and shall contain the minimum data and information indicated in Form 5607.16.

Form 5607.16
Blast (shot) Record

Block 1
General Information

1	Blast date:	Blast Number:	Blast Time:	Permit Number:
2	Blast location by address including city, county or town:			
3	Blast location by GPS coordinates: □ check box if unknown			
4	Name of Permit Holder:			
5	Name of Blaster in charge (print):			
6	Signature of Blaster in charge:			
7	Certification Number of Blaster in charge:			

Block 2
General Environmental Conditions

1	Weather (Clear? Cloudy? Overcast?)	Wind direction and speed @_____mph	Temperature F° / C°
2	Topography (Flat? Hilly? Mountainous?)	Distance from blast site to nearest inhabited building:	Distance from nearest inhabited building determined by: □ GPS coordinates □ Measurement □ Estimated
3	Use of nearest inhabited building (Dwelling? Business? Apartment Building? School?)	Direction from blast site to nearest inhabited building:	Direction from blast site to nearest inhabited building determined by: □ GPS instrument □ Compass □ Estimated

Additional Blaster notations on environmental conditions:

Block 3
Shot Layout and Precautions Taken (N/A = Not Applicable)

1	Number of holes	Diameter of hole or holes	Depth of hole or holes
2	Were any holes decked? □ Yes □ No	How many holes were decked? □ N/A	How many decks per hole? □ N/A
		(If applicable, indicate on any attached shot pattern drawing which holes were decked and the number of decks for the holes.)	

3	Shot pattern □ Check this box if only single hole.	Depth of sub-drilling	Drilling angle
4	Burden	Spacing of holes	Water height
5	Stemming height	Material used for stemming	Check box for flyrock precautions taken □ Mats □ Overburden □ None taken
Additional Blaster notations on shot layout and precautions:			

Block 4
Seismic Control Measures (N/A = Not Applicable)

1	Was scaled distance formula used? □ Yes □ No	Indicate which scaled distance equation was used. □ N/A □ W(lb)={D(ft)/50}^{2} □ W(lb)={D(ft)/55}^{2} □ W(lb)={D(ft)/65}^{2}	Maximum allowable charge weight per 8 ms based on scaled distance. □ N/A
2	Was seismograph used? □ Yes □ No	Seismograph manufacturer and model number: □ N/A	Seismograph serial number: □ N/A Seismograph's last calibration date. □ N/A

3	Distance and direction seismograph from blast site □ N/A	Distance determined by: □ N/A □ GPS coordinates □ Estimated □ Measurement
4	Seismograph □ N/A Geophone Minimum Frequency _____ Hz Seismograph Microphone Minimum Frequency _____ Hz	Seismograph recordings: □ N/A Transverse _____ in/s _____ Hz Vertical _____ in/s _____ Hz Longitudinal _____ in/s _____ Hz Acoustic _____ dB _____ Hz
5	Seismograph trigger level □ N/A _____ in/s _____ dB	
Additional Blaster notations on seismic control measures:		

Block 5
Quantity and Product

1	Maximum allowable charge weight per 8 ms interval □ Delay not used _____ lbs	Initiation (Check) □ Electric □ Non-electric □ Electronic
2	Maximum number of holes/decks per 8 ms interval □ Delay not used _____ lbs	
3	Maximum weight or sticks of explosive per hole _____ lbs	Firing device manufacturer and model: □ N/A

Explosive Product listing (Attach additional pages as needed.)

4	Manufacturer	Product name, description or brand	Number of units	Unit weight (lb)

5	Total explosive weight in this shot: lbs.
Additional Blaster notations on product and quantities:	

Block 6 Completion of Shot Record and General Comments	
General comments on shot not included in notes above:	
Date shot report completed:	Time shot report completed:
Printed name and signature of person completing shot report if different from Block 1, Lines 5 and 6.	(Print) (Signature)

AA. Change Section 5608.2 to read:

5608.2 Permit application. Prior to issuing permits for a fireworks display, plans for the fireworks display, inspections of the display site, and demonstrations of the display operations shall be approved. A plan establishing procedures to follow and actions to be taken in the event that a shell fails to ignite in, discharge from a mortar, or fails to function over the fallout area or other malfunctions shall be provided to the fire code official.

In addition to the requirements of Section 5601.2.3.1, a permit to conduct a fireworks display shall not be issued to any applicant without the applicant identifying on the application the pyrotechnician who will be in responsible charge of the fireworks display and who is appropriately certified as a pyrotechnician in accordance with Section 5601.4.1.

Exception: Permits are not required for the use or display of permissible fireworks on private property with the consent of the owner of such property.

BB. Change Section 5608.3 to read:

5608.3 Approved fireworks displays. Approved fireworks displays shall include only the approved fireworks 1.3G, fireworks 1.4G, fireworks 1.4S, and pyrotechnic articles 1.4G. The design, setup, conducting, or direct onsite supervision of the design, setup, and conducting of any fireworks display, either inside a building or outdoors, shall be performed only by persons certified by the SFMO in accordance with Section 5601.4.1 as a pyrotechnician (firework operator), and at least one person properly certified by the SFMO as a pyrotechnician shall be present at the site where the fireworks display is being conducted. The approved fireworks shall be arranged, located, discharged, and fired in a manner that will not pose a hazard to property or endanger any person.

Exception: Certification as a pyrotechnician is not required for the use or display of permissible fireworks when conducted on private property with the consent of the owner of such property.

CC. Change Section 5608.4 to read:

5608.4 Clearance. Spectators, spectator parking areas, and dwellings, buildings, or structures shall not be located within the display site. The site for the outdoor land or water display shall have at least 100-foot per inch (31-m/2.4mm) radius of internal mortar diameter of the largest shell to be fired as shown in Table 5608.4.

Exceptions:

1. This provision shall not apply to pyrotechnic special effects and fireworks displays using Division 1.4G materials before a proximate audience in accordance with NFPA 1126.

2. This provision shall not apply to unoccupied dwellings, buildings, and structures with the approval of the building owner and the fire code official.

DD. Add Table 5608.4 to read:

Table 5608.4
Distances for Outdoor Fireworks Display Sites: Minimum Separation Distances from Mortars to Spectators for Land and Water Displays

Mortar Size[a]		Minimum Secured Diameter of Site		Vertical Mortars[b]		Angled Mortars[c] 1/3 offset		Mortars to Special Hazards[d]	
in.	mm	ft	m	ft	m	ft	m	ft	m
<3	<76	300	92	150	46	100	31	300	92
3	76	600	183	300	92	200	61	600	183
4	102	800	244	400	122	266	81	800	244
5	127	1000	305	500	152	334	102	1000	305

6	152	1200	366	600	183	400	122	1200	366
7	178	1400	427	700	213	467	142	1400	427
8	203	1600	488	800	244	534	163	1600	488
10	254	2000	610	1000	305	667	203	2000	610
12	305	2400	732	1200	366	800	244	2400	732
>12	Requires the approval of the fire official								

[a] Aerial shells, mines, and comets shall be classified and described only in terms of the inside diameter of the mortar from which they are fired (e.g., 3-in. (76-mm) aerial shells, mines and comets are only for use in 3-in. (76-mm) mortars).

[b] Where the mortars are positioned vertically, the mortars shall be placed at the approximate center of the display site.

[c] Mortars shall be permitted to be angled during a display to allow for wind and to carry shells away from the main spectator viewing areas. For angled mortars, the minimum secured diameter of the display site does not change. Only the location of the mortars within the secured area changes when the mortars are angled.

[d] Note that this is only the distance to the special hazards. The minimum secured diameter of the display site does not change.

EE. Add Sections 5608.4.1 and 5608.4.2 to read:

5608.4.1 Nonsplitting, nonbursting comets, and mines. For nonsplitting or no-bursting comets and mines containing only stars or nonsplitting or nonbursting comets, the minimum required radius of the display site shall be 50 feet per inch (15.24 m per 25.4 mm) of the internal mortar diameter of the largest comet or mine to be fired, one-half that shown in Table 5608.4.

5608.4.2 Special distance requirements. The minimum distance requirements of Table 5608.4 shall be adjusted as follows:

1. For chain-fused aerial shells and comets and mines to be fired from mortars, racks, or other holders that are sufficiently strong to prevent their being repositioned in the event of an explosive malfunction of the aerial shells, comets, or mines, the minimum required radius shall be the same as that required in Sections 5608.4 and 5608.4.1. For chain-fused aerial shells and comets and mines to be fired from mortars, racks, or other holders that are not sufficiently strong to prevent their being repositioned in the event of an explosive malfunction of the aerial shells, comets, or mines, or if there is doubt concerning the strength of racks holding chain-fused mortars based upon the largest mortar in the sequence, the minimum required radius shall be double that required in Sections 5608.4 and 5608.4.1.

2. Distances from the point of discharge of any firework to a health care or detention and correctional facility or the bulk storage of materials that have flammability, explosive, or toxic hazard shall be at least twice the distances specified in Table 5608.4.

3. The minimum required spectator separation distance for roman candles and cakes that produce aerial shells, comets, or mine effects shall be the same as the minimum required radius specified in Table 5608.4.

4. Aerial shells, comets and mines, and roman candles and cakes shall be permitted to be angled if the dud shells or components are carried away from the main spectator area and either of the following requirements is satisfied:

4.1. The offset specified in Table 5608.4 is followed.

4.2. The separation distance is correspondingly increased in the direction of the angle.

If the offset provided in Table 5608.4 is followed, the mortars or tubes shall be angled so that any dud shells or components fall at a point approximately equal to the offset of the mortars or tubes from the otherwise required discharge point but in the opposite direction.

13VAC5-52-540. IFC Chapter 57 Flammable and Combustible Liquids.

A. The following changes shall be made to Section 5701, General:

1. Add Section 5701.1.1 to read:

5701.1.1 Other regulations. Provisions of Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91) and Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580) addressing the maintenance and operational aspects of underground and aboveground storage tanks subject to those regulations are hereby incorporated by reference to be an enforceable part of this code. Where differences occur between the provisions of this code and the incorporated provisions of 9VAC25-91 and 9VAC25-580, the provisions of 9VAC25-91 and 9VAC25-580 shall apply.

Note: For requirements for the installation, repair, upgrade, and closure of such tanks, see Section 414.6.2 of the USBC, Part I, Construction.

2. Delete item 11 (items 1 through 10, 12 and 13 remain) of Section 5701.2.

3. Change Section 5701.3 to read:

5701.3 Referenced documents. The applicable requirements of Chapter 50, other chapters of this code, and the applicable building code pertaining to flammable liquids shall apply.

4. Change Section 5701.4 to read:

5701.4 Permits. Permits shall be required as set forth in Section 107.2.

B. The following changes shall be made to Section 5703, General Requirements:

1. Change Sections 5703.1 and 5703.1.1 to read:

5703.1 Electrical. Electrical wiring and equipment shall be maintained in accordance with Chapter 6, NFPA 70, and the applicable building code.

5703.1.1 Classified locations for flammable liquids. Where flammable liquids are stored, handled, dispensed, or mixed, the extent of classified locations identified in accordance with the applicable building code shall be maintained. The extent of the classified area is allowed to be reduced, or eliminated where sufficient technical justification is provided to the fire code official that a concentration in the area in excess of 25% of the lower flammable limit (LFL) cannot be generated.

2. Delete Table 5703.1.1.

3. Change Section 5703.1.2 to read:

5703.1.2 Classified locations for combustible liquids. In areas where Class II or Class III liquids are heated above their flash points, the extent of classified locations identified in accordance with the applicable building code shall be maintained.

4. Change Section 5703.1.3 to read:

5703.1.3 Other applications. The fire code official is authorized to determine the extent of the Class I electrical equipment and wiring location when a condition is not regulated by the applicable building code, this code, or NFPA 70.

5. Change Sections 5703.2 and 5703.6 to read:

5703.2 Fire protection. Fire protection for the storage, use, dispensing, mixing, handling, and onsite transportation of flammable and combustible liquids shall be maintained in accordance with this chapter, Chapter 9, and the applicable building code.

5703.6 Piping systems. Piping systems and their component parts for flammable and combustible liquids shall be maintained in accordance with this section and the applicable building code.

6. Change Section 5703.6.1. Delete Section 5703.6.2.

5703.6.1 Nonapplicability. The provisions of Section 5703.6 shall not apply to gas or oil well installations; piping that is integral to stationary or portable engines, including aircraft, watercraft, and motor vehicles; and piping in connection with boilers and pressure vessels regulated by the applicable building code.

7. Delete Table 5703.6.2.

8. Delete Sections 5703.6.2.1 and 5703.6.3.

9. Change Section 5703.6.3.1 to read:

5703.6.3.1 Existing piping. Existing piping shall be tested in accordance with the applicable building code when the fire code official has reasonable cause to believe that a leak exists. Piping that could contain flammable or combustible liquids shall not be tested pneumatically. Such tests shall be at the expense of the owner or operator.

Exception: Vapor-recovery piping is allowed to be tested using an inert gas.

10. Delete Sections 5703.6.6 through 5703.6.7, 5703.6.9, 5703.6.9.1, and 5703.6.11 and change Sections 5703.6.4, 5703.6.5, 5703.6.8, and 5703.6.10 to read:

5703.6.4 Protection from vehicles. Guard posts or other approved means shall be maintained to protect piping, valves, or fittings subject to vehicular damage in accordance with Section 312.

5703.6.5 Protection from external corrosion and galvanic action. Where subject to external corrosion, piping, related fluid-handling components, and supports for both underground and aboveground applications shall maintain corrosion protection.

5703.6.8 Piping supports. Piping systems required to be substantially supported and protected against physical damage and excessive stresses arising from settlement, vibration, expansion, contraction, or exposure to fire shall have the support and protection maintained.

5703.6.10 Pipe joints. Joints shall be maintained liquid tight.

C. The following changes shall be made to Section 5704, Storage:

1. Change Sections 5704.1 and 5704.2.5.

5704.1 General. The storage of flammable and combustible liquids in containers and tanks shall be in accordance with this section and the applicable sections of Chapter 50. For tanks subject to Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91) and Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580), see Section 5701.1.1.

5704.2.5 Explosion control. Explosion control shall be maintained in accordance with Chapter 9 and the applicable building code.

2. Delete Sections 5704.2.7.1 through 5704.2.7.3.5.3 and change Section 5704.2.7 to read:

5704.2.7 Maintenance requirements for tanks. Tanks shall be maintained in accordance with NFPA 30. Each tank shall maintain a permanent nameplate or marking indicating the standard used as the basis of design.

3. Change Section 5704.2.7.4 to read:

5704.2.7.4 Emergency venting. Where provided in accordance with the applicable building code, emergency venting for stationary, aboveground tanks shall be maintained.

4. Delete Sections 5704.2.7.5 and 5704.2.7.5.1.

5. Delete Section 5704.2.7.5.3.

6. Delete Sections 5704.2.7.5.5 through 5704.2.7.5.5.2.

7. Delete Sections 5704.2.7.5.7 and 5704.2.7.5.8.

8. Change Section 5704.2.7.6 to read:

5704.2.7.6 Repair, alteration, or reconstruction of tanks and piping. The repair, alteration, or reconstruction, including welding, cutting, and hot tapping of storage tanks and piping that have been placed in service, shall be in accordance with NFPA 30 and the applicable building code. Hot work, as defined in Section 202, on such tanks shall be conducted in accordance with Section 3510.

9. Delete Sections 5704.2.7.7 through 5704.2.7.9.

10. Delete Sections 5704.2.7.11 through 5704.2.8.3.

11. Change Section 5704.2.8.5 to read:

5704.2.8.5 Anchoring. Vaults and their tanks shall maintain anchoring in accordance with the applicable building code to withstand uplifting by ground water or flooding, including when the tank is empty.

12. Delete Sections 5704.2.8.7 and 5704.2.8.8.

13. Change Section 5704.2.8.9 to read:

5704.2.8.9 Ventilation. Where required by the applicable building code, vaults that contain tanks of Class I liquids provided with an exhaust system shall be operated and maintained in accordance with Section 5004.3.

14. Delete Section 5704.2.8.10 and change Section 5704.2.8.11 to read:

5704.2.8.11 Liquid and vapor detection. Where required by the applicable building code, vaults shall maintain an approved vapor and liquid detection system. Where required by the applicable building code the following arrangements shall be maintained. The system shall be maintained with onsite audible and visual warning devices with battery backup. Vapor detection systems shall be maintained to sound an alarm when the system detects vapors that reach or exceed 25% of the lower explosive limit (LEL) of the liquid stored. Where required, liquid detection systems shall be maintained to sound an alarm upon detection of any liquid, including water. Liquid detectors shall be maintained in accordance with the manufacturer's instructions. Where required, activation of either vapor or liquid detection systems shall cause a signal to be sounded at an approved, constantly attended location within the facility serving the tanks or at an approved location. Where required by the applicable building code, activation of vapor detection systems shall also shut off dispenser pumps.

15. Delete Sections 5704.2.8.13 and 5704.2.8.14.

16. Delete Section 5704.2.8.16.

17. Delete Section 5704.2.8.18.

18. Change Sections 5704.2.9 and 5704.2.9.1 to read:

5704.2.9 Aboveground tanks. Aboveground storage of flammable and combustible liquids in tanks shall comply with Section 5704.2 and Sections 5704.2.9.1 through 5704.2.9.7.7. For tanks subject to Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91), see Section 5701.1.1.

5704.2.9.1 Existing noncompliant installations. Existing aboveground tanks shall be maintained in accordance with the code requirements that were applicable at the time of installation. Aboveground tanks that were installed in violation of code requirements applicable at the time of installation shall be made code compliant or shall be removed in accordance with Section 5704.2.14.

19. Delete Sections 5704.2.9.2 through 5704.2.9.2.3.

20. Change Section 5704.2.9.3 to read:

5704.2.9.3 Supports, foundations, and anchorage. Supports, foundations, and anchorages for aboveground tanks shall be maintained in accordance with NFPA 30 and the applicable building code.

21. Change Sections 5704.2.9.4 and 5704.2.9.5 to read:

5704.2.9.4 Stairways, platforms, and walkways. Stairways, platforms, and walkways shall be maintained in accordance with NFPA 30 and the applicable building code.

5704.2.9.5 Aboveground tanks inside of buildings. Aboveground tanks inside of buildings shall be maintained in accordance with the applicable building code and Sections 5704.2.9.5.1 and 5704.2.9.5.2.

22. Change Sections 5704.2.9.5.1 and 5704.2.9.5.2 to read:

5704.2.9.5.1 Overfill prevention. Where required by the applicable building code, aboveground tanks storing Class I, Class II, and Class IIIA liquids inside buildings shall

maintain a device or other means to prevent overflow into the building, including a float valve, a preset meter on the fill line, a valve actuated by the weight of the tank's contents, a low-head pump that is incapable of producing overflow, or a liquid-tight overflow pipe at least one pipe size larger than the fill pipe and discharging by gravity back to the outside source of liquid or to an approved location. Where required, tanks containing Class IIIB liquids and connected to fuel-burning equipment shall maintain a means to prevent overflow into buildings in accordance with the applicable building code.

5704.2.9.5.2 Fill pipe connection operations. Where required by the applicable building code, fill pipe connections for tanks storing Class I, Class II, and Class IIIA liquids and Class IIIB liquids connected to fuel-burning equipment shall be maintained in accordance with Section 5704.2.9.7.7.

23. Change Section 5704.2.9.6 to read:

5704.2.9.6 Aboveground tanks outside of buildings. Aboveground tanks outside of buildings shall be maintained in accordance with the applicable building code.

24. Delete Sections 5704.2.9.6.1 through 5704.2.9.7.3.

25. Change Sections 5704.2.9.7.5, 5704.2.9.7.5.2, and 5704.2.9.7.6 to read:

5704.2.9.7.5 Overfill prevention. Protected aboveground tanks shall not be filled in excess of 95% of their capacity. Where required by the applicable building code, an overfill prevention system shall be maintained for each tank. During tank-filling operations, the system shall comply with one of the following unless otherwise approved in accordance with the applicable building code:

1. The system shall:

1.1. Provide an independent means of notifying the person filling the tank that the fluid level has reached 90% of tank capacity by providing an audible or visual alarm signal, providing a tank level gauge marked at 90% of tank capacity, or other approved means; and

1.2. Automatically shut off the flow of fuel to the tank when the quantity of liquid in the tank reaches 95% of tank capacity. For rigid hose fuel-delivery systems, an approved means shall be provided to empty the fill hose into the tank after the automatic shutoff device is activated.

2. The system shall reduce the flow rate to not more than 15 gallons per minute (0.95 L/s) so that at the reduced flow rate, the tank will not overfill for 30 minutes and automatically shut off flow into the tank so that none of the fittings on the top of the tank are exposed to product because of overfilling.

5704.2.9.7.5.2 Determination of available tank capacity. The filling procedure shall require the person filling the tank to determine the gallonage (literage) required to fill it to 90% of capacity before commencing the fill operation.

5704.2.9.7.6 Fill pipe connections. Where required by the applicable building code, the fill pipe shall be maintained with a means for making a direct connection to the tank vehicle's fuel delivery hose so that the delivery of fuel is not exposed to the open air during the filling operation.

26. Delete Sections 5704.2.9.7.8 through 5704.2.10.3.

27. Delete Section 5704.2.10.5.

28. Change Sections 5704.2.11 and 5704.2.11.1 to read:

5704.2.11 Underground tanks. Underground storage of flammable and combustible liquids in tanks shall comply with Section 5704.2 and Sections 5704.2.11.1 through 5704.2.11.4.2. For tanks subject to Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580), see Section 5701.1.1.

5704.2.11.1 Location. The location of flammable and combustible liquid storage tanks located underground, either outside or under buildings, shall be in accordance with the applicable building code.

29. Delete Section 5704.2.11.2 and change Sections 5704.2.11.3 and 5704.2.11.4 to read:

5704.2.11.3 Overfill protection and prevention systems. Fill pipes shall be equipped with a spill container and where required by the applicable building code, an overfill prevention system in accordance with NFPA 30.

5704.2.11.4 Leak prevention. Leak prevention for underground tanks shall be maintained in accordance with the applicable building code and Sections 5704.2.11.4.1 and 5704.2.11.4.2.

30. Change Section 5704.2.11.4.2 to read:

5704.2.11.4.2 Leak detection. Where required by the applicable building code, underground storage tank systems shall maintain an approved method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30.

31. Delete Section 5704.2.11.4.2.1.

32. Change Section 5704.2.12.2 to read:

5704.2.12.2 Testing of underground tanks. Before being covered or placed in use, tanks and piping connected to underground tanks shall be tested for tightness in the presence of the fire code official. Piping shall be tested in accordance with the applicable building code. The system shall not be covered until it has been approved.

33. Change Sections 5704.2.13.1.1, 5704.2.13.1.2, 5704.2.13.1.3, and 5704.2.13.1.5 to read:

5704.2.13.1.1 Temporarily out of service. Underground tanks temporarily out of service shall have the fill line, gauge opening, vapor return, and pump connection secure

against tampering. Normal and emergency vent lines shall remain open and be maintained.

Exception: Underground storage tank systems subject to Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580) that are out-of-service shall comply with the temporary closure requirements of 9VAC25-580-310.

5704.2.13.1.2 Out of service for 90 days. Underground tanks not used for a period of 90 days shall be safeguarded in accordance with all the following or be removed in accordance with Section 5704.2.14:

1. Flammable or combustible liquids shall be removed from the tank.

2. All piping, including fill line, gauge opening, vapor return, and pump connection, shall be capped or plugged and secured from tampering.

3. Normal and emergency vent lines shall remain open and be maintained.

5704.2.13.1.3 Out of service for one year. Underground tanks that have been out of service for a period of one year shall be removed from the ground in accordance with Section 5704.2.14 or abandoned in place in accordance with Section 5704.2.13.1.4.

Exception: Underground storage tank systems subject to Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580) that are in compliance with the performance standards of 9VAC25-580-50 and 9VAC25-580-60 are allowed to remain temporarily closed for a period of more than one year in accordance with 9VAC25-580-310 as part of the Virginia Department of Environmental Quality's program.

5704.2.13.1.5 Reinstallation of underground tanks. Tanks that are to be reinstalled for flammable or combustible liquid service shall be approved by the building official.

34. Change Section 5704.3 to read:

5704.3 Container and portable tank storage. Storage of flammable and combustible liquids in closed containers that do not exceed 60 gallons (227 L) in individual capacity and portable tanks that do not exceed 660 gallons (2498 L) in individual capacity and limited transfers incidental thereto shall comply with Sections 5704.3.1 through 5704.3.8.4.

35. Change Section 5704.3.3.5 to read:

5704.3.3.5 Shelf storage. Shelving shall be of approved construction, adequately braced, and anchored. Seismic requirements shall be in accordance with the applicable building code.

36. Delete Section 5704.3.3.5.2 and change Section 5704.3.3.5.1 to read:

5704.3.3.5.1 Use of wood. Wood of at least one inch (25 mm) nominal thickness is allowed to be used as shelving, racks, dunnage, scuffboards, floor overlay, and similar installations.

37. Change Section 5704.3.3.6 to read:

5704.3.3.6 Rack storage. Where storage on racks is allowed by the applicable building code and elsewhere in this code, a minimum four-foot-wide (1219 mm) aisle shall be maintained between adjacent rack sections and any adjacent storage of liquids unless otherwise approved by the applicable building code. Main aisles shall be a minimum of eight feet (2438 mm) wide unless otherwise approved by the applicable building code.

38. Change Section 5704.3.4 to read:

5704.3.4 Quantity limits for storage. Liquid storage quantity limitations comply with Sections 5704.3.4.1 through 5704.3.4.4 and the applicable building code.

39. Change Section 5704.3.4.1 to read:

5704.3.4.1 Maximum allowable quantity per control area. For occupancies other than Group M wholesale and retail sales uses, indoor storage of flammable and combustible liquids exceeding the maximum allowable quantities per control area indicated in the applicable building code or the additional limitations set forth in this section shall be approved by the building official in accordance with the applicable building code.

For Group M occupancy wholesale and retail sales uses, indoor storage of flammable and combustible liquids shall not exceed the maximum allowable quantities per control area indicated in the applicable building code unless approved by the building official in accordance with the applicable building code.

Storage of hazardous production material flammable and combustible liquids in Group H-5 occupancies shall be in accordance with Chapter 27 and the applicable building code.

40. Delete Table 5704.3.4.1.

41. Change Sections 5704.3.4.2 through 5704.3.4.4 to read:

5704.3.4.2 Occupancy quantity limits. The following limits for quantities of stored flammable or combustible liquids shall not be exceeded unless approved by the building official in accordance with the applicable building code:

1. Group A occupancies: Quantities in Group A occupancies shall not exceed that necessary for demonstration, treatment, laboratory work, maintenance purposes, and operation of equipment and shall not exceed quantities set forth in the applicable building code.

2. Group B occupancies: Quantities in drinking, dining, office, and school uses within Group B occupancies shall not exceed that necessary for demonstration, treatment, laboratory work, maintenance purposes, and operation of

equipment and shall not exceed quantities set forth in the applicable building code.

3. Group E occupancies: Quantities in Group E occupancies shall not exceed that necessary for demonstration, treatment, laboratory work, maintenance purposes, and operation of equipment and shall not exceed quantities set forth in the applicable building code.

4. Group F occupancies: Quantities in dining, office, and school uses within Group F occupancies shall not exceed that necessary for demonstration, laboratory work, maintenance purposes, and operation of equipment and shall not exceed quantities set forth in the applicable building code.

5. Group I occupancies: Quantities in Group I occupancies shall not exceed that necessary for demonstration, laboratory work, maintenance purposes, and operation of equipment and shall not exceed quantities set forth in the applicable building code.

6. Group M occupancies: Quantities in dining, office, and school uses within Group M occupancies shall not exceed that necessary for demonstration, laboratory work, maintenance purposes, and operation of equipment and shall not exceed quantities set forth in the applicable building code. The maximum allowable quantities for storage in wholesale and retail sales areas shall be in accordance with Section 5704.3.4.1.

7. Group R occupancies: Quantities in Group R occupancies shall not exceed that necessary for maintenance purposes and operation of equipment and shall not exceed quantities set forth in the applicable building code.

8. Group S occupancies: Quantities in dining and office uses within Group S occupancies shall not exceed that necessary for demonstration, laboratory work, maintenance purposes, and operation of equipment and shall not exceed quantities set forth in the applicable building code.

5704.3.4.3 Quantities exceeding limits for control areas. Where required by the applicable building code, quantities exceeding those allowed in control areas set forth in Section 5704.3.4.1 shall be in liquid storage rooms or liquid storage warehouses approved by the building official in accordance with Sections 5704.3.7 and 5704.3.8, and the applicable building code.

5704.3.4.4 Liquids for maintenance and operation of equipment. In all occupancies, quantities of flammable and combustible liquids in excess of 10 gallons (38 L) used for maintenance purposes and the operation of equipment shall be stored in liquid storage cabinets in accordance with Section 5704.3.2. Quantities not exceeding 10 gallons (38 L) are allowed to be stored outside of a cabinet when in approved containers located in private garages or other approved locations.

42. Change Section 5704.3.5.1 to read:

5704.3.5.1 Basement storage. Class I, Class II, and Class IIIA liquids shall be allowed to be stored in basements in amounts not exceeding the maximum allowable quantity per control area for use-open systems when approved by the building official in accordance with the applicable building code.

43. Change Exception to Section 5704.3.6.2 to read:

Exception: Metal containers not exceeding 55 gallons (208 L) are allowed to store up to 240 gallons (908 L) of the maximum allowable quantity per control area of Class IB and Class IC liquids in a control area. The building shall be equipped throughout with an approved automatic sprinkler system in accordance with the applicable building code. The containers shall be provided with plastic caps without cap seals and shall be stored upright. Containers shall not be stacked or stored in racks and shall not be located in areas accessible to the public.

44. Change Section 5704.3.7.1 to read:

5704.3.7.1 General. Quantities of liquids exceeding those set forth in the applicable building code for storage in control areas shall be stored in a liquid storage room complying with the applicable building code.

45. Change Section 5704.3.7.2.2 to read:

5704.3.7.2.2 Separation and aisles. Unless otherwise approved in accordance with the applicable building code, separation and aisles shall comply with this section.

Piles shall be separated from each other by at least four-foot (1219 mm) aisles. Aisles shall be provided so that all containers are 20 feet (6096 mm) or less from an aisle. Where the storage of liquids is on racks, a minimum four-foot-wide (1219 mm) aisle shall be provided between adjacent rows of racks and adjacent storage of liquids. Main aisles shall be a minimum of eight feet (2438 mm) wide.

Additional aisles shall be maintained for access to doors, required windows and ventilation openings, standpipe connections, mechanical equipment, and switches. Such aisles shall be at least three feet (914 mm) in width, unless greater widths are required for separation of piles or racks, in which case the greater width shall be provided.

46. Change Sections 5704.3.7.3 through 5704.3.7.5 to read:

5704.3.7.3 Spill control and secondary containment. Where provided or required by the applicable building code, liquid storage rooms shall maintain spill control and secondary containment in accordance with Section 5004.2 and the applicable building code.

5704.3.7.4 Ventilation. Where provided or required by the applicable building code, liquid storage rooms shall be ventilated in accordance with Section 5004.3 and the applicable building code.

5704.3.7.5 Fire protection. Fire protection for liquid storage rooms shall comply with the applicable building code and Sections 5704.3.7.5.1 and 5704.3.7.5.2.

47. Change Section 5704.3.7.5.1 to read:

5704.3.7.5.1 Fire-extinguishing systems. Fire-extinguishing systems for liquid storage rooms shall be maintained in accordance with Chapter 9 and the applicable building code.

48. Change Sections 5704.3.8 and 5704.3.8.1 to read:

5704.3.8 Liquid storage warehouses. Buildings used for storage of flammable or combustible liquids in quantities exceeding those set forth in Section 5704.3.4 for control areas and Section 5704.3.7 for liquid storage rooms shall be approved by the building official in accordance with the applicable building code.

5704.3.8.1 Quantities and storage arrangement. The total quantities of liquids in a liquid storage warehouse shall not be limited unless otherwise limited by the applicable building code. Unless otherwise approved by the applicable building code, the arrangement of storage shall be in accordance with Table 5704.3.6.3(2) or 5704.3.6.3(3).

49. Change Sections 5704.3.8.1.1 and 5704.3.8.1.2 to read:

5704.3.8.1.1 Mixed storage. Mixed storage shall be in accordance with Section 5704.3.7.2.1 unless otherwise required by the applicable building code.

5704.3.8.1.2 Separation and aisles. Separation and aisles shall be in accordance with Section 5704.3.7.2.2 unless otherwise required by the applicable building code.

50. Change Sections 5704.3.8.2 through 5704.3.8.4 to read:

5704.3.8.2 Spill control and secondary containment. Liquid storage warehouses shall maintain spill control and secondary containment as set forth in Section 5004.2 and the applicable building code.

5704.3.8.3 Ventilation. Ventilation for liquid storage warehouses storing containers greater than five gallons (19 L) in capacity shall be operated and maintained in accordance with the applicable building code.

5704.3.8.4 Fire extinguishing systems. Automatic sprinkler systems for liquid storage warehouses shall be maintained in accordance with Chapter 9 and the applicable building code.

51. Change Section 5704.3.8.5 to read:

5704.3.8.5 Warehouse hose lines. Where provided or required by the applicable building code, in liquid storage warehouses either 1-1/2-inch (38 mm) lined or one-inch (25 mm) hard rubber hand hose lines shall be maintained in sufficient number to reach all liquid storage areas and shall be maintained in accordance with Chapter 9.

52. Change Section 5704.4.3 to read:

5704.4.3 Spill control and secondary containment. Where provided in accordance with the applicable building code, spill control and secondary containment for storage areas shall be maintained in accordance with Section 5703.4 and the applicable building code.

Exception:

Containers stored on approved containment pallets in accordance with Section 5004.2.3 and containers stored in cabinets and lockers with integral spill containment.

53. Change Section 5704.4.7 to read:

5704.4.7 Weather protection. Weather protection for outdoor storage shall be maintained in accordance with Section 5004.13.and the applicable building code.

D. The following change shall be made to Section 5705, Dispensing, Use, Mixing, and Handling:

1. Change Section 5705.3.6.2.3 to read:

5705.3.6.2.3 Solvent quantity limits. Solvent quantities shall be limited in accordance with the applicable building code.

2. Change Section 5705.5 including Items 4 and 7 (Items 1 through 3 and 5 through 6 remain) to read:

5705.5 Alcohol-based hand rubs classified as Class I or Class II liquids. The use of approved dispensers containing alcohol-based hand rubs classified as Class I or Class II liquids shall be in accordance with all of the following:

4. Dispensers shall be mounted or located so that the bottom of the dispenser is not less than 42 inches (1067 mm) and not more than 48 inches (1219 mm) above the finished floor.

7. Dispensers installed or located in occupancies with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout with an approved automatic sprinkler system in accordance with NFPA 13 or NFPA 13R or the applicable building code.

3. Change Section 5705.5.1, including Item 5 (Items 1 through 4 remain) to read:

5705.5.1 Corridor installations. Where approved dispensers containing alcohol-based hand rubs are installed or located in corridors, they shall be in accordance with all of the following:

5. Projections into a corridor shall be in accordance with the applicable building code.

E. The following changes shall be made to Section 5706, Special Operations:

1. Change Section 5706.2.4.2 to read:

5706.2.4.2 Vents. Tanks shall be provided with a method of normal and emergency venting. Normal vents shall be in accordance with the applicable building code.

Emergency vents shall be in accordance with Section 5704.2.7.4. Emergency vents shall be arranged to

discharge in a manner that prevents localized overheating or flame impingement on any part of the tank in the event that vapors from such vents are ignited.

2. Change Section 5706.2.6 to read:

5706.2.6 Spill control, drainage control, and diking. Where provided or required by the applicable building code, indoor storage and dispensing areas shall be maintained with spill control and drainage control as set forth in Section 5703.4. Where provided or required by the applicable building code, outdoor storage areas shall be maintained with drainage control or diking as set forth in Section 5704.2.10.

3. Delete Section 5706.3.3.1.

4. Change Sections 5706.4.1, 5706.4.2, 5706.4.4, 5706.4.7.6, and 5706.4.9 to read:

5706.4.1 Building construction. Buildings shall be maintained in accordance with the applicable building code.

5706.4.2 Means of egress. Rooms in which liquids are stored, used, or transferred by pumps shall have means of egress maintained in accordance with Chapter 10 and the applicable building code to prevent occupants from being trapped in the event of fire.

5706.4.4 Ventilation. Ventilation for rooms, buildings, and enclosures in which Class I liquids are pumped, used, or transferred shall be operated and maintained in accordance with the applicable building code. When natural ventilation is inadequate, mechanical ventilation shall be provided in accordance with the applicable building code.

5706.4.7.6 Piping, valves, and fittings. Piping, valves, and fittings shall be maintained in accordance with the applicable building code.

5706.4.9 Drainage control. Loading and unloading areas shall be maintained with drainage control in accordance with this chapter and the applicable building code.

5. Change Sections 5706.4.10, 5706.5.1.2, 5706.5.1.3, 5706.5.1.5, 5706.5.1.6, 5706.8.1, 5706.8.3, and 5706.8.5 to read:

5706.4.10 Fire protection. Fire protection for bulk plants or terminals shall be maintained in accordance with Chapter 9, Sections 5706.4.10.1 through 5706.4.10.4, and the applicable building code.

5706.5.1.2 Weather protection canopies. Where weather protection canopies are provided, they shall be approved by the building official and maintained in accordance with Section 5004.13 and the applicable building code.

5706.5.1.3 Ventilation. Ventilation shall be operated and maintained to prevent accumulation of vapors in accordance with the applicable building code.

5706.5.1.5 Spill control and secondary containment. Areas where transfer operations are located shall be maintained with spill control and secondary containment in accordance with the applicable building code.

5706.5.1.6 Fire protection. Fire protection shall be maintained in accordance with Chapter 9, Section 5703.2, and the applicable building code.

5706.8.1 Over-pressure or vacuum protection. Tanks and equipment shall have independent venting for over-pressure or vacuum conditions that might occur from malfunction of the vapor recovery or processing system.

Exception: For tanks, venting shall comply with the applicable building code.

5706.8.3 Vapor collection systems and overfill protection. The operation of the vapor collection system and overfill protection shall be in accordance with this section and Section 19.5 of NFPA 30.

5706.8.5 Overfill protection. Storage tanks served by vapor recovery or processing systems shall be equipped with overfill protection in accordance with the applicable building code.

6. Change Section 5707.1 and delete Sections 5707.1.1 through 5707.6.6.

Section 5707.1 to read:

5707.1 Mobile fueling operations. Delivery of Class I, Class II, and Class III liquids to the fuel tank of a highway vehicle from a tank vehicle, a tank carried on a vehicle, or a nonportable container is prohibited.

Exceptions:

1. The refueling of highway vehicles in an emergency.

2. The refueling of vehicles in compliance with Sections 5706.5.4.1 through 5706.5.4.5.

3. Vehicles used for farm operations and machinery.

13VAC5-52-550. IFC Chapter 58 Flammable Gases and Flammable Cryogenic Fluids.

A. Change Sections 5801.1 and 5801.2 to read:

5801.1 Scope. The storage and use of flammable gases and flammable cryogenic fluids shall be in accordance with this chapter and NFPA 55. Compressed gases shall also comply with Chapter 53 and cryogenic fluids shall also comply with Chapter 55. Flammable cryogenic fluids shall comply with Section 5806. Hydrogen motor fuel-dispensing stations and repair garages and their associated aboveground hydrogen storage systems shall also be designed, constructed and maintained in accordance with Chapter 23 and NFPA 2.

Exceptions:

1. Gases used as refrigerants in refrigeration systems (see Section 608).

2. Liquefied petroleum gases and natural gases regulated by Chapter 61.

3. Fuel-gas systems and appliances regulated under the International Fuel Gas Code other than gaseous hydrogen systems and appliances.

4. Pyrophoric gases in accordance with Chapter 64.

5801.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Sections 5803.1, 5803.1.1.2, 5803.1.5, and 5804.1 to read:

5803.1 Quantities not exceeding the maximum allowable quantity per control area. The storage and use of flammable gases in amounts not exceeding the maximum allowable quantity per control area in accordance with the applicable building code shall be maintained in accordance with Sections 5001, 5003, 5801, and 5803.

5803.1.1.2 Aggregate quantity. The aggregate quantities of flammable gases used for maintenance purposes and operation of equipment shall be maintained as to not exceed the maximum allowable quantity per control area indicated in the applicable building code.

5803.1.5 Electrical. Electrical wiring and equipment shall be maintained in accordance with Chapter 6 and NFPA 70.

5804.1 Indoor storage. Indoor storage of flammable gases in amounts exceeding the maximum allowable quantity per control area in accordance with the applicable building code, shall be maintained in accordance with Sections 5001, 5003, and 5004; this chapter; and the applicable building code.

C. Change Sections 5804.1.1, 5805.1, and 5806.2 to read:

5804.1.1 Explosion control. Buildings or portions thereof containing flammable gases and provided with explosion control shall be maintained in accordance with Chapter 9 and remain in accordance with the applicable building code.

5805.1 General. The use of flammable gases in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1.1 or Table 5003.1.1(3) shall be in accordance with Sections 5001, 5003, and 5005 and this chapter.

5806.2 Limitations. Storage of flammable cryogenic fluids in stationary containers outside of buildings may be subject to local ordinances or other regulations.

D. Change Section 5806.3 to read:

5806.3 Aboveground tanks for liquid hydrogen. Aboveground tanks for the storage of liquid hydrogen shall be maintained in accordance with the applicable building code.

E. Delete Sections 5806.3.1 through 5806.3.2.1.

F. Change Section 5806.4 to read:

5806.4 Underground tanks for liquid hydrogen. Underground tanks for the storage of liquid hydrogen shall be maintained in accordance with the applicable building code.

G. Delete Sections 5806.4.1 through 5806.4.3.

H. Change Section 5806.4.4 to read:

5806.4.4 Anchorage and security. Anchorage provided for tanks and systems shall be maintained in accordance with the applicable building code.

I. Delete Sections 5806.4.5 through 5806.4.8.3.

J. Change Sections 5807.1.10 and 5808.1 to read:

5807.1.10 Electrical. Electrical components for metal hydride storage systems shall be maintained in accordance with Chapter 6 and NFPA 70.

5808.1 General. Where required by the applicable building code, hydrogen fuel gas rooms shall be maintained.

K. Delete Sections 5808.3.1 and 5808.3.2 and change Sections 5808.2 and 5808.3 to read:

5808.2 Location. Unless otherwise permitted by the applicable building code, hydrogen fuel gas operations shall not be located below grade.

5808.3 Pressure control. Unless otherwise approved by the applicable building code, hydrogen fuel gas rooms shall maintain a negative pressure in relation to surrounding rooms and spaces. Windows shall remain in accordance with the applicable building code and shall not be able to be opened.

L. Change Sections 5808.4 and 5808.5 to read:

5808.4 Exhaust ventilation. Ventilation required for hydrogen fuel gas rooms shall be maintained and operated in accordance with the applicable building code.

5808.5 Gas detection system. Gas detection systems required for hydrogen fuel gas rooms shall be maintained and operated in accordance with the applicable building code.

M. Change Sections 5808.5.1 and 5808.5.2 to read:

5808.5.1 Operation. Where provided, activation of the gas detection system shall occur as designed and approved under the applicable building code. At no time shall the level of flammable gas exceed 25% lower flammable limit (LFL) and the system shall be maintained to result in both of the following:

1. Initiation of distinct audible and visual alarm signals both inside and outside of the hydrogen fuel gas room.

2. Activation of the mechanical exhaust ventilation system.

5808.5.2 Failure of the gas detection system. Unless otherwise required by the applicable building code, failure of the gas detection system shall result in the activation of the mechanical exhaust ventilation system, cessation of the hydrogen generation, and the sounding of a trouble signal in an approved location.

N. Change Sections 5808.6 and 5808.7 to read:

5808.6 Explosion control. Explosion control required for hydrogen fuel gas rooms shall be maintained in accordance with the applicable building code and Chapter 9.

5808.7 Standby power. Standby power provided for mechanical ventilation and gas detection systems shall be maintained in accordance with Chapter 12 and remain in accordance with the applicable building code.

13VAC5-52-560. IFC Chapter 59 Flammable Solids.

A. Change Section 5901.2 to read:

5901.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 5904.1 to read:

5904.1 Indoor storage. Indoor storage of flammable solids in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1.1 and the applicable building code shall be maintained in accordance with Sections 5001, 5003, and 5004 and this chapter and approved in accordance with the applicable building code.

C. Change Section 5904.1.1 to read:

5904.1.1 Pile size limits and location. Unless otherwise approved in accordance with the applicable building code, flammable solids stored in quantities greater than 1,000 cubic feet (28 m^3) shall be separated into piles each not larger than 1,000 cubic feet (28 m^3).

D. Change Sections 5904.1.2 and 5904.1.3 to read:

5904.1.2 Aisles. Unless otherwise approved in accordance with the applicable building code, aisle widths between piles shall be maintained to be not less than the height of the piles or four feet (1219 mm), whichever is greater.

5904.1.3 Basement storage. Flammable solids shall not be stored in basements unless approved in accordance with the applicable building code.

E. Change Sections 5906.2 through 5906.2.3 to read:

5906.2 Storage of magnesium articles. The storage of magnesium shall comply with Sections 5906.2.1 through 5906.4.3.

5906.2.1 Storage of greater than 50 cubic feet. Unless otherwise approved in accordance with the applicable building code, magnesium storage in quantities greater than 50 cubic feet (1.4 m^3) shall be separated from storage of other materials that are either combustible or in combustible containers by aisles. Piles shall be separated by aisles with a minimum width of not less than the pile height.

5906.2.2 Storage of greater than 1,000 cubic feet. Unless otherwise approved in accordance with the applicable building code, magnesium storage in quantities greater than 1,000 cubic feet (28 m^3) shall be separated into piles not larger than 1,000 cubic feet (28 m^3) each. Piles shall be separated by aisles with a minimum width of not less than the pile height. Unless approved by the applicable building code, such storage shall not be located in nonsprinklered buildings of Type III, Type IV, or Type V construction, as defined in the applicable building code.

5906.2.3 Storage in combustible containers or within 30 feet of other combustibles. Unless otherwise approved in accordance with the applicable building code, where stored in nonsprinklered buildings of Type III, Type IV, or Type V construction as defined in the applicable building code, magnesium shall not be stored in combustible containers or within 30 feet (9144 mm) of other combustibles.

F. Change Sections 5906.3.1 and 5906.4 to read:

5906.3.1 Indoor storage. Unless otherwise approved in accordance with the applicable building code, indoor storage of pigs, ingots, and billets shall only be on floors of noncombustible construction. Piles shall not be larger than 500,000 pounds (226.8 metric tons) each. Piles shall be separated by aisles with a minimum width of not less than one-half the pile height.

5906.4 Storage of fine magnesium scrap. The storage of scrap magnesium shall comply with Sections 5906.4.1 through 5906.4.3.

G. Change Sections 5906.4.2 through 5906.5 and Sections 5906.5.3, 5906.5.3.1, and 5906.5.4 to read:

5906.4.2 Storage of 50 to 1,000 cubic feet. Unless otherwise approved by the applicable building code, storage of fine magnesium scrap in quantities greater than 50 cubic feet (1.4 m^3) (six 55-gallon (208 L) steel drums) shall be maintained separated from other occupancies by an open space of at least 50 feet (15,240 mm) or by a fire-resistance rated barrier constructed and approved in accordance with applicable building code.

5906.4.3 Storage of greater than 1,000 cubic feet. Storage of fine magnesium scrap in quantities greater than 1,000 cubic feet (28 m^3) shall be maintained separated from all buildings other than those used for magnesium scrap recovery operations by a distance of not less than 100 feet (30,480 mm) unless otherwise approved by the applicable building code.

5906.5 Use of magnesium. The use of magnesium shall comply with Sections 5906.5.1 through 5906.5.8 and only be conducted in buildings or structures approved for that use in accordance with the applicable building code.

5906.5.3 Dust collection. Where provided, magnesium grinding and buffing and wire-brushing operations, other than rough finishing of castings, shall be conducted with approved hoods or enclosures for dust collection in accordance with the applicable building code.

5906.5.3.1 Ducts. Where provided, connecting ducts or suction tubes shall be maintained as completely grounded, as short as possible, and without bends. Ducts shall be maintained with a smooth interior, with internal lap joints pointing in the direction of airflow, and without unused capped side outlets, pockets, or other dead-end spaces which allow an accumulation of dust.

5906.5.4 Power supply interlock. Where provided, power supply to machines shall be maintained to be interlocked with exhaust airflow and liquid pressure level or flow. The interlock shall be maintained to shut down the machine it serves when the dust removal or separator system is not operating properly.

H. Change Section 5906.3.2 (Exceptions remain) to read:

5906.5.3.2 Independent dust separators. Each machine shall be maintained with an individual dust-separating unit in accordance with the applicable building code.

I. Change Section 5906.5.5 to read:

5906.5.5 Electrical equipment. Electric wiring, fixtures, and equipment in the immediate vicinity of and attached to dust-producing machines, including those used in connection with separator equipment, shall be maintained in accordance with Chapter 6, NFPA 70, and the applicable building code.

J. Change Section 5906.5.6 to read:

5906.5.6 Grounding. Where required by the applicable building code, equipment shall be maintained securely grounded by permanent ground wires in accordance with NFPA 70.

13VAC5-52-570. IFC Chapter 60 Highly Toxic and Toxic Materials.

A. Change Sections 6001.1 (Exceptions remain) and 6001.2 to read:

6001.1 Scope. The outside storage and use of highly toxic and toxic materials and the maintenance and operational aspects of inside storage and use of highly toxic and toxic materials shall comply with this chapter. Compressed gases shall also comply with Chapter 53.

6001.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 6003.1.4 to read:

6003.1.4 Indoor storage. Indoor storage of highly toxic and toxic solids and liquids shall comply with the applicable building code.

C. Delete Section 6003.2.5 and change Sections 6003.1.4.1 and 6003.1.4.2 to read:

6003.1.4.1 Floors. In addition to the requirements set forth in Section 5004.12, where liquid-tight floors were required by the applicable building code, liquid-tight floors shall be maintained.

6003.1.4.2 Separation of highly toxic solids and liquids. In addition to the requirements set forth in Section 5003.9.8, unless approved in accordance with the applicable building code, highly toxic solids and liquids in storage shall be located in approved hazardous material storage cabinets or isolated from other hazardous material storage in accordance with the applicable building code.

D. Change Item 5 of Section 6004.1.2 (Items 1 through 4 remain) to read:

5. Gas cabinets required by Section 6004.2 or 6004.3 shall be equipped with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard. Alternative fire-extinguishing systems shall not be used.

E. Change Item 4 of Section 6004.1.3 (Items 1 through 3 remain) to read:

4. Exhausted enclosures required by Section 6004.2 or 6004.3 shall be equipped with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard. Alternative fire-extinguishing systems shall not be used.

F. Change Sections 6004.2.2.5, 6004.2.2.6, and 6004.2.2.8 to read:

6004.2.2.5 Piping and controls of stationary tanks. In addition to the requirements of Section 5003.2.2, piping and controls on stationary tanks shall comply with the following requirements:

1. Pressure relief devices shall be vented to a treatment system designed in accordance with Section 6004.2.2.7.

Exception: Pressure relief devices on outdoor tanks provided exclusively for relieving pressure due to fire exposure are not required to be vented to a treatment system provided that:

1. The material in the tank is not flammable.

2. The tank is located not less than 30 feet (9144 mm) from combustible materials or structures or is shielded by a fire barrier complying with Section 6004.3.2.1.1.

2. Filling or dispensing connections shall be provided with a means of local exhaust. Such exhaust shall be designed to capture fumes and vapors. The exhaust shall be directed to a treatment system in accordance with Section 6004.2.2.7.

3. Stationary tanks shall be provided with a means of excess flow control on all tank inlet or outlet connections.

Exceptions:

1. Inlet connections designed to prevent backflow.

2. Pressure relief devices.

6004.2.2.6 Gas rooms. Gas rooms shall comply with Section 5003.8.4 and both of the following requirements:

1. The exhaust ventilation from gas rooms shall be directed to an exhaust system.

2. Approved automatic sprinkler systems in gas rooms shall be maintained in accordance with Chapter 9 and the applicable building code.

6004.2.2.8 Emergency power. Emergency power shall be maintained in accordance with Chapter 12, NFPA 70, and the applicable building code.

G. Delete Sections 6004.2.2.8.1, 6004.2.2.10, 6004.2.2.10.1, 6004.2.2.10.2, and 6004.2.2.10.3 and change Section 6004.2.2.9 to read:

6004.2.2.9 Automatic fire detection system for highly toxic compressed gases. Where provided in rooms or areas where highly toxic compressed gases are stored or used, an approved automatic fire detection system shall be maintained in accordance with Chapter 9 and the applicable building code.

H. Change Section 6004.3.3 (Exception remains) to read:

6004.3.3 Outdoor storage weather protection for portable tanks and cylinders. Weather protection in accordance with Section 5004.13 shall be provided for portable tanks and cylinders located outdoors and not within gas cabinets or exhausted enclosures. The storage area shall be equipped with an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard.

13VAC5-52-580. IFC Chapter 61 Liquefied Petroleum Gases.

A. Change Sections 6101.1 and 6101.2 and delete Section 6101.3.

6101.1 Scope. Storage, handling, and transportation of liquefied petroleum gas (LP-gas) and LP-gas equipment pertinent to systems for such uses shall comply with this chapter and NFPA 58. Properties of LP-gases shall be determined in accordance with Appendix B of NFPA 58.

6101.2 Permits. Permits shall be required as set forth in Section 107.2. Distributors shall not fill an LP-gas container for which a permit is required unless an operational permit has been issued for that location by the fire code official, except when the container is for temporary use on construction sites.

B. Change the title of Section 6103 to "Use of Equipment" and change Section 6103.1 to read:

6103.1 General. The use of LP-gas equipment shall be in accordance with the International Fuel Gas Code and NFPA 58, except as otherwise provided in this chapter.

C. Delete Section 6103.3.

D. Change Section 6104.1 to read:

6104.1 General. The storage and handling of LP-gas and the maintenance of related equipment shall comply with applicable building code.

E. Delete Sections 6104.2 through 6104.4 and Table 6104.3.

F. Add Section 6106.4 to read:

6106.4 DOTn cylinders filled on site. U.S. Department of Transportation (DOTn) cylinders in stationary service that are filled onsite and therefore are not under the jurisdiction of DOTn either shall be requalified in accordance with DOTn requirements or shall be visually inspected within 12 years of the date of manufacture or within five years from May 1, 2008, whichever is later, and within every five years thereafter, in accordance with the following:

1. Any cylinder that fails one or more of the criteria in Item 3 shall not be refilled or continued in service until the condition is corrected.

2. Personnel shall be trained and qualified to perform inspections.

3. Visual inspection shall be performed in accordance with the following:

3.1. The cylinder is checked for exposure to fire, dents, cuts, digs, gouges, and corrosion according to CGA C-6, Standards for Visual Inspection of Steel Compressed Gas Cylinders, except that paragraph 4.2.1(1) of that standard (which requires tare weight certification), shall not be part of the required inspection criteria.

3.2. The cylinder protective collar (where utilized) and the foot ring are intact and are firmly attached.

3.3. The cylinder is painted or coated to retard corrosion.

3.4. The cylinder pressure relief valve indicates no visible damage, corrosion of operating components, or obstructions.

3.5. There is no leakage from the cylinder or its appurtenances that is detectable without the use of instruments.

3.6. The cylinder is installed on a firm foundation and is not in contact with the soil.

3.7. A cylinder that passed the visual inspection shall be marked with the month and year of the examination followed by the letter "E" (example: 10-01E, indicating requalification in October 2001 by the external inspection method).

3.8. The results of the visual inspection shall be documented, and a record of the inspection shall be retained for a five-year period.

Exception: Any inspection procedure outlined in Items 3.1 through 3.8 that would require a cylinder be moved in such a manner that disconnection from the piping system would be necessary shall be omitted, provided the other inspection results do not indicate further inspection is warranted.

G. Change Section 6108.1 to read:

6108.1 General. Fire protection for installations having LP-gas storage containers shall be maintained in accordance with the applicable building code.

H. Change Section 6109.11.2 to read:

6109.11.2 Storage. Storage in buildings and rooms used for gas manufacturing, gas storage, gas air mixing, and vaporization shall be approved in accordance with the applicable building code. These areas are to be maintained in accordance with the applicable building code and NFPA 58.

I. Add an exception to Section 6111.2 to read:

Exception: The unattended outdoor parking of LP-gas tank vehicles may also be in accordance with Section 9.7.2 of NFPA 58.

13VAC5-52-590. IFC Chapter 62 Organic Peroxides.

A. Change Section 6201.2 to read:

6201.2 Permits. Permits shall be required for organic peroxides as set forth in Section 107.2.

B. Change Sections 6203.1 and 6203.1.1 to read:

6203.1 Quantities not exceeding the maximum allowable quantity per control area. The storage and use of organic peroxides in amounts not exceeding the maximum allowable quantity per control area indicated in Section 5003.1 shall be maintained in accordance with Sections 5001, 5003, 6201, and 6203.

6203.1.1 Special limitations for indoor storage and use by occupancy. The indoor storage and use of organic peroxides shall be maintained in accordance with Sections 6203.1.1.1 through 6203.1.1.4.

C. Change Sections 6203.1.1.1 (Items 1 and 2 remain) and 6203.1.1.3 to read:

6203.1.1.1 Group A, E, I, or U occupancies. Unless otherwise approved by the applicable building code, in Group A, E, I, or U occupancies, any amount of unclassified detonable and Class I organic peroxides shall be stored in accordance with the following:

6203.1.1.3 Group B, F, M, or S occupancies. Unless otherwise approved by the applicable building code, unclassified detonable, and Class I organic peroxides shall not be stored or used in offices or retail sales areas of Group B, F, M, or S occupancies.

D. Change Section 6203.1.1.4 (Items 1 and 2 remain) to read:

6203.1.1.4 Classrooms. Unless otherwise approved by the applicable building code, in classrooms in Group B, F, or M occupancies, any amount of unclassified detonable and Class 1 organic peroxides shall be stored in accordance with the following:

E. Change Sections 6203.2 and 6204.1.1 to read:

6203.2 Quantities exceeding the maximum allowable quantity per control area. The storage and use of organic peroxides in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1 shall be maintained in accordance with Chapter 50 and this chapter and comply with the applicable building code.

6204.1.1 Detached storage. Unless otherwise approved by the applicable building code, storage of organic peroxides shall be in detached buildings when required by Section 5003.8.2.

F. Change the Title of Table 6204.1.2 to Organic Peroxides-Distance to Exposures from Outdoor Storage Areas.

G. Change Section 6204.1.2 through 6204.1.6 to read:

6204.1.2 Distance from detached buildings to exposures. Detached storage buildings for Class I, Class II, Class III, Class IV, and Class V organic peroxides shall be located in accordance with the applicable building code and maintain separation distances from exposures in accordance with Table 6304.1.2. Detached buildings containing quantities of unclassified detonable organic peroxides in excess of those set forth in Table 5003.8.2 shall be located in accordance with the applicable building code and maintain separation distances from exposures in accordance with Table 5604.5.2(1).

6204.1.3 Liquid-tight floor. Liquid-tight floors shall be maintained in accordance with the applicable building code.

6204.1.4 Electrical wiring and equipment. Electrical wiring and equipment in storage areas for Class I or Class II organic peroxides shall be maintained in accordance with Chapter 6 and remain as classified in accordance with the applicable building code.

6204.1.5 Smoke detection. Smoke detection systems shall be maintained in accordance with the Chapter 9.

6204.1.6 Maximum quantities. Maximum allowable quantities per building in a mixed occupancy building or detached storage building shall not exceed the amounts set forth by the applicable building code.

H. Change Sections 6204.1.10 and 6204.1.11 to read:

6204.1.10 Explosion control. Explosion control for indoor storage rooms, areas, and buildings containing unclassified detonable and Class 1 organic peroxides shall be maintained in accordance with Chapter 9.

6204.1.11 Standby power. Standby power for storage areas of Class 1 and unclassified detonable organic peroxide shall be maintained in accordance with Section 1203.

I. Delete Section 6204.1.11.1.

J. Change Section 6204.2.5 to read:

6204.2.5 Separation. In addition to the requirements of Section 5003.9.8, outdoor storage areas for organic peroxides in amounts exceeding those specified in Table

5003.12 shall be located a minimum distance of 50 feet (15,240 mm) from other hazardous material storage.

K. Change Section 6205.1 to read:

6205.1 General. The use of organic peroxides in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1.1 or Table 5003.1.1(3) shall be in accordance with Sections 5001, 5003, and 5005 and this chapter.

13VAC5-52-600. IFC Chapter 63 Oxidizers, Oxidizing Gases and Oxidizing Cryogenic Fluid.

A. Change Section 6301.2 to read:

6301.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 6303.1 to read:

6303.1 Quantities not exceeding the maximum allowable quantity per control area. The storage and use of oxidizing materials in amounts not exceeding the maximum allowable quantity per control area indicated in Section 5003.1 shall be maintained in accordance with Sections 5001, 5003, 6301, and 6303. Oxidizing gases shall also comply with Chapter 53.

C. Change Section 6303.1.1.1.1 to read:

6303.1.1.1.1 Group A, E, I, or U occupancies. Unless otherwise approved by the applicable building code, in Group A, E, I, or U occupancies, any amount of Class 4 liquid and solid oxidizers shall be stored in accordance with the following:

1. Class 4 liquid and solid oxidizers shall be stored in hazardous materials storage cabinets complying with Section 5003.8.7.

2. The hazardous materials storage cabinets shall not contain other storage.

D. Change Sections 6303.1.5 and 6303.1.1.2 to read:

6303.1.5 Class 3 liquid and solid oxidizers. Unless otherwise approved by the applicable building code, a maximum of 200 pounds (91 kg) of solid or 20 gallons (76 L) of liquid Class 3 oxidizer is allowed in Group I occupancies when such materials are necessary for maintenance purposes or operation of equipment. The oxidizers shall be stored in approved containers and in an approved manner.

6303.1.1.2 Oxidizing gases. Except for cylinders of nonliquefied compressed gases not exceeding a capacity of 250 cubic feet (7 m^3) or liquefied compressed gases not exceeding a capacity of 46 pounds (21 kg) each used for maintenance purposes, patient care, or operation of equipment, oxidizing gases shall not be stored or used in Group A, E, I, or R occupancies or in offices in Group B occupancies. The aggregate quantities of gases used for maintenance purposes and operation of equipment shall not exceed the maximum allowable quantity per control area listed in the applicable building code. Medical gas systems and medical gas supply cylinders shall also be in accordance with Section 5306.

E. Change Section 6303.1.2 to read:

6303.1.2 Emergency shutoff. Compressed gas systems conveying oxidizing gases with manual or automatic emergency shutoff valves in accordance with the applicable building code shall be maintained and be accessible to be activated at each point of use and at each source.

F. Delete Sections 6303.1.2.1 and 6303.1.2.2.

G. Change Sections 6303.1.3 and 6303.1.4 to read:

6303.1.3 Ignition source control. Ignition sources in areas containing oxidizing gases shall be controlled in accordance with Section 5003.7.

6303.1.4 Class 1 oxidizer storage configuration. The outdoor storage configuration of Class I liquid and solid oxidizers shall be as set forth in Table 6303.2. Indoor storage shall be in accordance with the applicable building code.

H. Change the title of Table 6303.1.4 to Outdoor Storage of Class 1 Oxidizer Liquids and Solids.

I. Change Sections 6304.1 through 6304.1.5 to read:

6304.1 Indoor storage. Indoor storage of oxidizing materials in amounts exceeding the maximum allowable quantity per control area indicated in the applicable building code shall be maintained in accordance with Sections 5001, 5003, and 5004 and this chapter and comply with the applicable building code.

6304.1.1 Explosion control. Explosion control for indoor storage rooms, areas, and buildings containing Class 4 liquid or solid oxidizers shall be maintained in accordance with Chapter 9.

6304.1.2 Automatic sprinkler system. The automatic sprinkler system for oxidizer storage shall be maintained in accordance with Chapter 9.

6304.1.3 Liquid-tight floor. In addition to Section 5004.12, liquid-tight floors of storage areas for liquid and solid oxidizers shall be maintained.

6304.1.4 Smoke detection. Smoke detection systems shall be maintained in accordance with Chapter 9.

6304.1.5 Storage conditions. The maximum quantity of oxidizers per building in storage buildings shall not exceed those quantities set forth in the applicable building code. The storage configuration for liquid and solid oxidizers shall be as set forth in the applicable building code. Class 2 oxidizers shall not be stored in basements unless approved by the applicable building code. Class 3 and Class 4 oxidizers in

amounts exceeding the maximum allowable quantity per control area set forth in 5003.1 shall be stored on the ground floor only unless otherwise approved by the applicable building code.

J. Delete Tables 6304.1.5(1), 6304.1.5(2), and 6304.1.5(3).

K. Change Section 6304.1.8 to read:

6304.1.8 Detached storage. Storage of liquid and solid oxidizers shall be in detached buildings where required by the applicable building code.

L. Change Section 6304.2.2 and change the title of Tables 6304.2.2(1), 6304.2.2(2), and 6304.2.2(3) to read:

6304.2.2 Storage configuration for liquid and solid oxidizers. Storage configuration for liquid and solid oxidizers shall be maintained in accordance with Table 6303.2 and Tables 6304.2.2(1) through 6304.2.2(3) and comply with the applicable building code.

Table 6304.2.2(1) Outdoor Storage of Class 2 Oxidizer Liquids and Solids.

Table 6304.2.2(2) Outdoor Storage of Class 3 Oxidizer Liquids and Solids.

Table 6304.2.2(3) Outdoor Storage of Class 4 Oxidizer Liquids and Solids.

M. Change Sections 6305.1 and 6306.4 to read:

6305.1 Scope. The use of oxidizers in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1.1 or Table 5003.1.1(3) shall be maintained in accordance with Sections 5001, 5003, and 5005 and this chapter and comply with the applicable building code. Oxidizing gases shall also comply with Chapter 53.

6306.4 Maximum aggregate quantity. The maximum aggregate quantity of liquid oxygen allowed in storage and in use in each dwelling unit shall be 31.6 gallons (120 L).

Exceptions:

1. The maximum aggregate quantity of liquid oxygen allowed in Group I-4 occupancies shall be limited by the maximum allowable quantity set forth in the applicable building code.

2. Where individual sleeping rooms are separated from the remainder of the dwelling unit by fire-resistant-rated assemblies constructed in accordance with the applicable building code, the maximum aggregate quantity per dwelling unit shall be increased to allow a maximum of 31.6 gallons (120 L) of liquid oxygen per sleeping room.

13VAC5-52-610. IFC Chapter 64 Pyrophoric Materials.

A. Change Section 6401.2 to read:

6401.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Sections 6403.1 and 6403.1.1 to read:

6403.1 Quantities not exceeding the maximum allowable quantity per control area. The storage and use of pyrophoric materials in amounts not exceeding the maximum allowable quantity per control area indicated in Section 5003.1 shall be maintained in accordance with Sections 5001, 5003, 6401, and 6403.

6403.1.1 Emergency shutoff. Manual or automatic emergency shutoff valves for compressed gas systems conveying pyrophoric gases shall be maintained and accessible to be activated at each point of use and at each source in accordance with the applicable building code.

C. Delete Sections 6403.1.1.1 and 6403.1.1.2, and change Section 6403.2.

6403.2 Quantities exceeding the maximum allowable quantity per control area. The storage and use of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1 shall be maintained in accordance with Chapter 50 and this chapter and comply with the applicable building code.

D. Change Sections 6404.1 and 6404.1.1 to read:

6404.1 Indoor storage. Indoor storage of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in the applicable building code shall be in accordance with Sections 5001, 5003, and 5004 and this chapter and comply with the applicable building code. The storage of silane gas and gas mixtures with a silane concentration of 1.37% or more by volume shall be maintained in accordance with CGA G-13.

6404.1.1 Liquid-tight floor. In addition to the requirements of Section 5004.12, liquid-tight floors shall be maintained in accordance with the applicable building code.

E. Change Sections 6404.1.2, 6404.1.3, 6404.1.4, and 6404.2.2 to read:

6404.1.2 Pyrophoric solids and liquids. Unless otherwise approved by the applicable building code, storage of pyrophoric solids and liquids shall be limited to the following:

1. A maximum area of 100 square feet (9.3 m^2) per pile. Storage shall not exceed five feet (1524 mm) in height. Individual containers shall not be stacked.

2. Aisles between storage piles shall be a minimum of 10 feet (3048 mm) in width.

3. Individual tanks or containers shall not exceed 500 gallons (1893 L) in capacity.

6404.1.3 Pyrophoric gases. Storage of pyrophoric gases shall be in detached buildings when required by the applicable building code.

6404.1.4 Separation from incompatible materials. In addition to the requirements of Section 5003.9.8, indoor storage of pyrophoric materials shall be isolated from incompatible hazardous materials in accordance with the applicable building code. Fire-resistance-rated construction and openings shall be maintained in accordance with Chapter 7.

Exception: Storage in approved hazardous materials storage cabinets constructed in accordance with Section 5003.8.7.

6404.2.2 Weather protection. Automatic fire-extinguishing systems for overhead sheltering of outdoor storage areas of pyrophoric materials shall be maintained in accordance with Chapter 9.

F. Change Sections 6405.1 and 6405.2 to read:

6405.1 General. The use of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1.1 or Table 5003.1.1(3) shall be in accordance with Sections 5001, 5003, and 5005 and this chapter.

6405.2 Weather protection. Automatic fire-extinguishing system for overhead sheltering of outdoor use areas of pyrophoric materials shall be maintained in accordance with Chapter 9.

13VAC5-52-620. IFC Chapter 65 Pyroxylin (Cellulose Nitrate) Plastics.

A. Change Section 6501.2 to read:

6501.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Sections 6504.1.1 and 6504.1.3 to read:

6504.1.1 Storage of incoming material. Unless otherwise approved by the applicable building code, where raw material in excess of 25 pounds (11 kg) is received in a building or fire area, raw material shall be stored in an approved vented cabinet or approved vented vault equipped with an approved automatic sprinkler system in accordance with the applicable building code.

6504.1.3 Storage of additional material. Raw material in excess of that allowed by Section 6504.1.2 shall remain stored in vented vaults or other arrangement approved in accordance with the applicable building code.

C. Change Section 6504.2 to read:

6504.2 Fire protection. Unless otherwise permitted by the applicable building code, buildings, or portions thereof used for the manufacture or storage of articles of cellulose nitrate (pyroxylin) plastic in quantities exceeding 100 pounds (45 kg) shall maintain an approved automatic sprinkler system in accordance with the applicable NFPA 13 standard and the applicable building code.

13VAC5-52-630. IFC Chapter 66 Unstable (Reactive) Materials.

A. Change Section 6601.2 to read:

6601.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 6603.1.1 to read:

6603.1.1 General. The storage and use of unstable (reactive) materials in amounts not exceeding the maximum allowable quantity per control area indicated in Section 5003.1 shall be in accordance with Sections 5001, 5003, 6601, and 6603.

C. Change Section 6603.1.2 to read:

6603.1.2 Limitations for indoor storage and use by occupancy. The indoor storage of unstable (reactive) materials shall be maintained in accordance with Sections 6603.1.2.1 through 6603.1.2.5 and comply with the applicable building code.

D. Change Sections 6603.1.2.1 and 6604.1 to read:

6603.1.2.1 Group A, E, I, or U occupancies. Unless otherwise approved by the applicable building code, in Group A, E, I, or U occupancies, any amount of Class 3 and Class 4 unstable (reactive) materials shall be stored in accordance with the following:

1. Class 3 and Class 4 unstable (reactive) materials shall be stored in hazardous material storage cabinets complying with Section 5003.8.7.

2. The hazardous material storage cabinets shall not contain other storage.

6604.1 Indoor storage. Indoor storage of unstable (reactive) materials in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1.1 shall be maintained in accordance with Sections 5001, 5003, and 5004 and this chapter and comply with the applicable building code.

In addition, Class 3 and Class 4 unstable (reactive) detonable materials shall be stored in accordance with the applicable building code requirements for explosives.

E. Change Section 6604.1.1 to read:

6604.1.1 Detached storage. Storage of unstable (reactive) materials shall be maintained in detached buildings when required by the applicable building code.

F. Change Sections 6604.1.2, 6604.1.3, and 6604.1.5 to read:

6604.1.2 Explosion control. Explosion control for indoor storage rooms, areas, and buildings containing Class 3 or Class 4 unstable (reactive) materials shall be maintained in accordance with Chapter 9.

6604.1.3 Liquid-tight floor. Liquid-tight floors of storage areas shall be maintained in accordance with the applicable building code.

6604.1.5 Location in building. Unstable (reactive) materials shall not be stored in basements unless approved.

G. Change Section 6605.1 to read:

6605.1 General. The use of unstable (reactive) materials in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1.1 or Table 5003.1.1(3) shall be in accordance with Sections 5001, 5003, and 5005 and this chapter.

13VAC5-52-640. IFC Chapter 67 Water-Reactive Solids and Liquids.

A. Change Section 6701.2 to read:

6701.2 Permits. Permits shall be required as set forth in Section 107.2.

B. Change Section 6703.1 to read:

6703.1 Quantities not exceeding the maximum allowable quantity per control area. The storage and use of water reactive solids and liquids in amounts not exceeding the maximum allowable quantity per control area indicated in Section 5003.1 shall be maintained in accordance with Sections 5001, 5003, 6701, and 6703.

C. Change Section 6703.2 to read:

6703.2 Quantities exceeding the maximum allowable quantity per control area. The storage and use of water-reactive solids and liquids in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1 shall be maintained in accordance with Chapter 50 and this chapter and comply with the applicable building code.

D. Change Section 6704.1 to read:

6704.1 Indoor storage. Indoor storage of water-reactive solids and liquids in amounts exceeding the maximum allowable quantity per control area indicated in the applicable building code shall be maintained in accordance with Sections 5001, 5003, and 5004 and this chapter and comply with the applicable building code.

E. Change Section 6704.1.1 to read:

6704.1.1 Detached storage. The storage of water-reactive solids and liquids shall be in detached buildings where required by the applicable building code.

F. Change Section 6704.1.2 to read:

6704.1.2 Liquid-tight floor. In addition to the provisions of Section 5004.12, liquid-tight floors in storage areas for water reactive solids and liquids shall be maintained in accordance with the applicable building code.

G. Change Section 6704.1.3 to read:

6704.1.3 Waterproof room. Rooms or areas used for the storage of water-reactive solids and liquids shall be maintained in a manner that resists the penetration of water in accordance with the applicable building code.

H. Change Section 6704.1.5 to read:

6704.1.5 Storage configuration. Water-reactive solids and liquids stored in quantities greater than 500 cubic feet (14 m^3) shall be maintained separated into piles, each not larger than 500 cubic feet (14 m^3) unless otherwise approved by the applicable building code. Aisle widths between piles shall not be less than the height of the pile or four feet (1219 mm), whichever is greater.

Exception: Water-reactive solids and liquids stored in tanks.

Class 2 water-reactive solids and liquids shall not be stored in basements unless such materials are stored in closed water-tight containers or tanks.

Class 3 water-reactive solids and liquids shall not be stored in basements.

Class 2 or 3 water-reactive solids and liquids shall not be stored with flammable liquids.

I. Change Section 6704.1.6 to read:

6704.1.6 Explosion control. Explosion control for indoor storage rooms, areas, and buildings containing Class 2 or Class 3 water-reactive solids and liquids shall be maintained in accordance with Chapter 9.

J. Change Section 6704.2.5 to read:

6704.2.5 Containment. Secondary containment shall be maintained in accordance with the provisions of Section 5004.2.2.

K. Change Section 6705.1 to read:

6705.1 General. The use of water-reactive solids and liquids in amounts exceeding the maximum allowable quantity per control area indicated in Section 5003.1.1 or Table 5003.1.1(3) shall be in accordance with Sections 5001, 5003, and 5005 and this chapter.

13VAC5-52-650. Reserved.

13VAC5-52-660. Reserved.

13VAC5-52-670. Reserved.

13VAC5-52-680. IFC Chapter 80 Referenced Standards.

Add the following standards to the list of referenced standards in Chapter 80 of the IFC:

Standard reference number	Title

CGA C-6 (2001)	Standards for Visual Inspection of Steel Compressed Gas Cylinders
NA3178	Smokeless Powder for Small Arms
NFPA 1124-06	Code for the Manufacture, Transportation, and Storage of Fireworks and Pyrotechnic Articles

DOCUMENTS INCORPORATED BY REFERENCE (13VAC5-52)

American National Standards Institute, 25 West 43rd Street, Fourth Floor, New York, NY 10036 (https://www.ansi.org):

ANSI Z21.69/CSA 6.16-15, Connectors for Movable Gas Appliances

ANSI/CGA P-18(2013), Standard for Bulk Inert Gas Systems

The American Society of Mechanical Engineers, Two Park Avenue, New York, NY 10016-5990 (https://www.asme.org):

ASME Boiler and Pressure Vessel Code-2010/2011 addenda

ASME A17.1-19/CSA B44-19, Safety Code for Elevators and Escalators

ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 (https://www.astm.org):

ASTM D 92-12b, Standard Test Method for Flash and Fire Points by Cleveland Open Cup

ASTM E 84-2013A, Test Method for Surface Burning Characteristics of Building Materials

ASTM E 108-2017, Standard Test Method for Fire Tests of Roof Coverings

ASTM E 1354-2017, Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter

ASTM E 1537-15, Standard Test Method for Fire Testing of Upholstered Furniture

ASTM E 1590-17, Standard Test Method for Fire Testing of Mattresses

State of California Department of Consumer Affairs, Bureau of Electronics and Appliance Repair, Home Furnishings and Thermal Insulation, 4244 South Market Court, Suite D, Sacramento, CA 95834-1243 (www.bearhfti.ca.gov):

California Technical Bulletin 129-1992

California Technical Bulletin 133-1991

Compressed Gas Association, 14501 George Carter Way, Suite 103, Chantilly, VA 20151 (www.cganet.com):

CGA C-6-2001, Standards for Visual Inspection of Steel Compressed Gas Cylinders, Eighth Edition

European Committee for Standardization (EN), Central Secretariat, Rue de Stassart 36, B-10 50 Brussels (https://www.cen.eu):

EN 1081, 1998 Resilient Floor Coverings-Determination of the Electrical Resistance

International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070 (http://www.iccsafe.org):

International Fire Code - 2021 Edition

International Fuel Gas Code - 2021 Edition

International Residential Code - 2021 Edition

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471 (http://www.nfpa.org):

NFPA 2-20, Hydrogen Technologies Code

NFPA 11-16, Standard for Low-, Medium- and High-Expansion Foam

NFPA 12-18, Standard on Carbon Dioxide Extinguishing Systems

NFPA 12A-18, Standard on Halon 1301 Fire Extinguishing Systems

NFPA 13-19, Standard for the Installation of Sprinkler Systems

NFPA 13D-19, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

NFPA 13R-19, Standard for the Installation of Sprinkler Systems in Low Rise Residential Occupancies

NFPA 14-19, Standard for the Installation of Standpipe and Hose Systems

NFPA 16-19, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems

NFPA 17-21, Standard for Dry Chemical Extinguishing Systems

NFPA 17A-21, Standard for Wet Chemical Extinguishing Systems

NFPA 20-19, Standard for the Installation of Stationary Pumps for Fire Protection

NFPA 25-20, Standard for Inspection, Testing and Maintenance of Water-based Fire Protection Systems

NFPA 30-21, Flammable and Combustible Liquids Code

NFPA 30A-21, Code for Motor Fuel Dispensing Facilities and Repair Garages

NFPA 30B-19, Code for the Manufacture and Storage of Aerosol Products

NFPA 31-20, Standard for the Installation of Oil-Burning Equipment

NFPA 32-16, Standard for Drycleaning Plants

NFPA 34-18, Standard for Dipping, Coating and Printing Processes Using Flammable or Combustible Liquids

NFPA 35-16, Standard for the Manufacture of Organic Coatings

NFPA 45-19, Standard on Fire Protection for Laboratories Using Chemicals

NFPA 52-19, Vehicular Gaseous Fuel System Code

NFPA 55-20, Compressed Gases and Cryogenic Fluids Code

NFPA 58-20, Liquefied Petroleum Gas Code

NFPA 59A-19, Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG)

NFPA 69-19, Standard on Explosion Prevention Systems

NFPA 70-20, National Electrical Code

NFPA 72-19, National Fire Alarm and Signaling Code

NFPA 80-19, Standard for Fire Doors and Other Opening Protectives

NFPA 86-19, Standard for Ovens and Furnaces

NFPA 96-21, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations

NFPA 110-19, Standard for Emergency and Standby Power Systems

NFPA 111-19, Standard on Stored Electrical Energy Emergency and Standby Power Systems

NFPA 211-16, Standard for Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances

NFPA 286-19, Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth

NFPA 303-21, Fire Protection Standard for Marinas and Boatyards

NFPA 495-18, Explosives Materials Code

NFPA 303-21, Fire Protection Standard for Marinas and Boatyards

NFPA 704-17, Standard System for Identification of the Hazards of Materials for Emergency Response

NFPA 720-15, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment

NFPA 853-20, Installation of Stationary Fuel Cell Power Systems

NFPA 1123-18, Code for Fireworks Display

NFPA 1124-06, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles

NFPA 1124-17, Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles

NFPA 1126-21, Standard for the Use of Pyrotechnics Before a Proximate Audience

NFPA 2001-18, Standard on Clean Agent Fire Extinguishing Systems

NFPA 2010-20, Standard for Fixed Aerosol Fire-Extinguishing Systems

Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062 (http://www.ul.com):

UL 80-07, Steel Tanks for Oil-Burner Fuels and Other Combustible Liquids-with revisions through August 2009

UL 87A-15, Outline of Investigation for Power-Operated Dispensing Devices for Gasoline and Gasoline/ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent

UL 142-06, Steel Aboveground Tanks for Flammable and Combustible Liquids-with revisions through February 12, 2010

UL 199E-04, Outline of Investigation for Fire Testing of Sprinklers and Water Spray Nozzles for Protection of Deep Fat Fryers

UL 217-15, Single and Multiple Station Smoke Alarms-with revisions through November 2016

UL 710B-2011, Recirculating Systems

UL 790-04, Standard Test Methods for Fire Tests of Roof Coverings-with revisions through October 2008

UL 1278-00, Standard for Movable and Wall- or Ceiling-Hung Electric Room Heaters, Third Edition, June 21, 2000

UL 1315-2017, Standard for Safety for Metal Waste Paper Containers

UL 1805-2002, Standard for Laboratory Hoods and Cabinets

VA.R. Doc. No. R22-7020; Filed January 27, 2023, 11:48 a.m.

Proposed Regulation

REGISTRAR'S NOTICE: The Board of Housing and Community Development is claiming an exemption from Article 2 of the Administrative Process Act pursuant to § 2.2-4006 A 12 of the Code of Virginia, which excludes regulations adopted by the Board of Housing and Community Development pursuant to the Statewide Fire Prevention Code (§ 27-94 et seq.), the Industrialized Building Safety Law (§ 36-70 et seq.), the Uniform Statewide Building Code (§ 36-97 et seq.), and § 36-98.3 of the Code of Virginia, provided the board (i) provides a Notice of Intended Regulatory Action in conformance with the provisions of § 2.2-4007.01, (ii)

publishes the proposed regulation and provides an opportunity for oral and written comments as provided in § 2.2-4007.03 of the Code of Virginia, and (iii) conducts at least one public hearing as provided in §§ 2.2-4009 and 36-100 of the Code of Virginia prior to the publishing of the proposed regulations. The board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Title of Regulation: **13VAC5-63. Virginia Uniform Statewide Building Code (amending 13VAC5-63-10, 13VAC5-63-20, 13VAC5-63-30, 13VAC5-63-70, 13VAC5-63-80, 13VAC5-63-100, 13VAC5-63-130, 13VAC5-63-160, 13VAC5-63-170, 13VAC5-63-180, 13VAC5-63-200, 13VAC5-63-210, 13VAC5-63-220, 13VAC5-63-226, 13VAC5-63-230, 13VAC5-63-240 through 13VAC5-63-280, 13VAC5-63-295, 13VAC5-63-300 through 13VAC5-63-360, 13VAC5-63-400 through 13VAC5-63-440, 13VAC5-63-450, 13VAC5-63-470, 13VAC5-63-485, 13VAC5-63-490, 13VAC5-63-510, 13VAC5-63-530 through 13VAC5-63-549).**

Statutory Authority: § 36-98 of the Code of Virginia.

Public Hearing Information:

May 8, 2023 - 10 a.m. - Virginia Housing Center, 4224 Cox Road, Glen Allen, VA 23060

Public hearing information: https://townhall.virginia.gov/L/viewmeeting.cfm?meetingid=37601

Public Comment Deadline: May 9, 2023.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA 23219, telephone (804) 786-6761, FAX (804) 371-7090, TDD (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

Background: The Uniform Statewide Building Code (USBC) is a regulation governing the construction, maintenance, and rehabilitation of new and existing building and structures. The USBC uses nationally recognized model building codes and standards produced by the International Code Council (ICC) and other standard-writing groups as the basis for the technical provisions of the regulation. Every three years, new editions of the model codes become available. At that time, the Board of Housing and Community Development (BHCD) initiates a regulatory action to incorporate the newest editions of the model codes into the regulation and accepts proposals for changes to the regulation from stakeholders and the public. The Department of Housing and Community Development staff maintains mailing lists for workgroups involving different subject areas of regulation and conducts workgroup meetings attended by stakeholder groups and the public to develop consensus recommendations, when possible, concerning proposals that have been submitted. The department uses an online program incorporating the provisions of the regulation and the model codes and standards to facilitate the submittal of proposals. A public hearing is held during the workgroup meeting stage of the process and a comment period established. Once workgroup meetings are completed, the BHCD has a series of meetings to consider each proposal, and those proposals approved are incorporated into the proposed regulation. After the publishing of the proposed regulation, the BHCD establishes a comment period and holds an additional public hearing. The BHCD then meets to consider public comments to develop a final regulation to complete the regulatory process.

Summary:

The following group of changes provides a summary of the substantive proposed amendments to the USBC:

(i) in 13VAC5-63-20, requires children's play structures installed inside buildings to be subject to the children's play structures section in Chapter 4 of the Virginia Construction Code (VCC) and clarifies that playground equipment typically found in a backyard, at a school, or in a public park are not USBC regulated structures;

(ii) in 13VAC5-63-70, updates the VCC by stating that fees levied pursuant to this section shall be used only to support the functions of the local building department;

(iii) in 13VAC5-63-80, deletes the qualifier for pools to not exceed 5,000 gallons to be exempt from permitting and allows for jurisdictions to not be forced to accept applications by mail when an online permit application option exists;

(iv) in 13VAC5-63-100, provides a mechanism to allow for the proactive cancellation or discontinuance of building permits by the permit holder or the owner;

(v) in 13VAC5-63-180, clarifies between buildings that are a threat to public safety and unsafe buildings or structures;

(vi) in 13VAC5-63-200, correlates definitions in the International Building Code (IBC) with the National Flood Insurance Program (NFIP);

(vii) in 13VAC5-63-210, clarifies scoping provisions of the Virginia Residential Code (VRC); updates the code provisions with the appropriate licensing authority for family day homes; correlates definitions in the International Residential Code (IRC) with the NFIP; clarifies the access requirements where photovoltaic systems are installed on roofs; removes the habitable attic technical provisions from the definition of "habitable attic" and places the requirements in the body of the code, with the intent of maintaining the existing Virginia technical amendments; exempts accessory dwelling units from the sound transmission requirements between dwelling units; deletes the ground fault circuit interrupter (GFCI) protection requirements for outside outlets serving HVAC systems; restricts the installation of electric resistance heating and of heat pumps that are designed to activate resistance back-up when outdoor temperatures are above 40ºF; updates the code provisions related to

duct testing to be consistent with the 2021 International Energy Conservation Code (IECC); requires new heating and cooling equipment that are part of a residential alteration to be sized in accordance with the IECC and that refrigeration cooling equipment to comply with applicable Underwriters' Laboratories (UL) standards; mandates a UL listing for any equipment using A2L refrigerant and field installed items to be installed per the manufacturer's installation instructions; and allows the use of green-colored, one-step solvent cement, which has already been approved in the 2024 International Plumbing Code (IPC);

(viii) in 13VAC5-63-220, provides the connection between the VCC and the International Fire Code (IFC) for plant processing or extraction facilities and clarifies that energy storage systems must comply with the applicable IFC requirements;

(ix) in 13VAC5-63-230, clarifies that fire walls create separate buildings for application of Chapter 9 of the VCC and other provisions beyond allowable height and area and deletes an exception that states party walls and fire walls on lot lines dividing certain buildings for ownership purposes are not required;

(x) in 13VAC5-63-240, deletes the new International Building Code (IBC) occupant load threshold for requiring an automatic sprinkler Group E fire area, maintaining the state amended fire area threshold; replaces the term "radiating cable" with "cabling"; and provides a reference to the IFC for the technical provisions and installation requirements for in-building emergency communication systems;

(xi) in 13VAC5-63-245, separates I-1 and I-3 occupancies in the Corridor Fire-Resistance Rating Table and provides specific ratings for each occupancy based on the presence of a sprinkler system; corrects a reference in the VCC; removes an invalid reference to deleted elevator hoistway provisions; and adds "public buildings" to the list of uses or occupancies already allowed to be provided with emergency supplemental hardware;

(xii) in 13VAC5-63-250, revises the exception for emergency supplemental hardware;

(xiii) in 13VAC5-63-264, removes the Virginia amendments to solar heat gain coefficients; corrects a prohibition to the use of dampers where grease ducts serving a Type 1 hood are installed; requires new heating and cooling equipment that are part of a commercial alteration to be sized in accordance with the Virginia Energy Conservation Code provisions for new construction; adds a new appendix to be used as an alternative to the building thermal envelope provisions of the International Energy Conservation Code (IECC) for Groups F, S, and U; restricts the installation of electric resistance heating and of heat pumps that are designed to activate resistance back-up when outdoor temperatures are above 40ºF; updates the code provisions related to duct testing to be consistent with the 2021 IECC; and requires new heating and cooling equipment that are part of a residential alteration to be sized in accordance with the IECC;

(xiv) in 13VAC5-63-270, incorporates provisions and design parameters for buildings in tornado prone regions;

(xv) in 13VAC5-63-300, deletes the GFCI protection requirements for outside outlets serving HVAC systems;

(xvi) in 13VAC5-63-310, corrects an error related to ventilation rates for general doctor and dentist offices; corrects referenced standards for refrigeration equipment; incorporates new reference standards for Group A2L, A2, A3, and B1 refrigerants; provides requirements for the changing of refrigerant from one safety class to another; updates the refrigerant table with new refrigerants added to ASHRAE Standard 34; requires high probability systems used for human comfort to use Group A1 or A2L refrigerant and restricts Group A3 and B3 refrigerants to laboratories and industrial occupancies; correlates the machinery room requirements in the International Mechanical Code with the 2019 edition of ASHRAE 15; deletes the ventilation system activation provisions for machinery rooms using Group A2L refrigerant; updates the UL 60335-2-89 standard to the most recent version; and expands the list of acceptable pressure test ports beyond a simple tee fitting by recognizing integral test ports in devices that meet the intent of the code;

(xvii) in 13VAC5-63-320, allows the use of green-colored, one-step solvent cement, which has already been approved in the 2024 IPC and allows food waste grinders to connect to grease interceptors if the discharge passes through a solid interceptor first;

(xviii) in 13VAC5-63-330, correlates the Virginia exceptions with the IBC requirements for fire service access elevators and occupant evacuation elevators and maintains the Virginia amendment that limits the applicability of occupant evacuation elevator requirements to buildings over 420 feet in building height;

(xix) in 13VAC5-63-340, relocates construction provisions from the Statewide Fire Prevention Code (SFPC) and correlates the SFPC and Virginia Existing Building Code (VEBC);

(xx) in 13VAC5-63-410, clarifies when to bypass the VEBC and when to use the VEBC when an I-2 or I-3 occupancy is involved and correlates the repair or replacement of smoke alarms in the VEBC with the VRC;

(xxi) in 13VAC5-63-420, requires elevation certificates to be prepared by a certified land surveyor or registered professional engineer licensed in Virginia;

(xxii) in 13VAC5-63-430, removes accessibility as a trigger to determine change of occupancy since there are

no change of occupancy driven accessibility requirements;

(xxiii) in 13VAC5-63-431, points to the VRC requirements for operational constraints of emergency escape and rescue openings;

(xxiv) in 13VAC5-63-432.5, clarifies how to apply the accessibility provisions to existing toilet facilities and drinking fountains;

(xxv) in 13VAC5-63-433, adds ACI 562 as a new referenced standard for assessing, designing, and repairing structural concrete;

(xxvi) in 13VAC5-63-433.3, deletes Section 603.6 (plumbing requirements triggered by alteration work) to remove the potential for conflicts with the exception to Section 710.1 (plumbing requirements triggered by work associated with a change of occupancy);

(xxvii) in 13VAC5-63-433.3, makes technical amendments and removes the exception to Section 707.2 (exterior wall rating for change of occupancy classification to a higher hazard category) of the VEBC;

(xxviii) in 13VAC5-63-438, deletes the sanitary facility requirements during construction to be congruent with the Virginia Plumbing Code and cleans up of the construction safeguards provisions to better correlate with the VCC and SFPC;

(xxix) in 13VAC5-63-450, revises the short title of the Virginia Maintenance Code (VMC) to the Virginia Property Maintenance Code (VPMC) to resolve the historical and practical issue of confusion with the Virginia Mechanical Code (VMC);

(xxx) in 13VAC5-63-470, clarifies that a tenant's responsibility is limited and protected under the Virginia Residential Landlord and Tenant Act (§ 55.1-1200 et seq. of the Code of Virginia) and simplifies the unsafe building provisions;

(xxxi) in 13VAC5-63-530, deletes construction and construction inspection provisions as they are not within the scope of the Virginia Maintenance Code;

(xxxii) in 13VAC5-63-540, clarifies the applicability of Appendix N of ASME A17.1;

(xxxiii) in 13VAC5-63-545, deletes invalid retrofit provisions; revises Section 704.1.1 to reference the applicable building code regarding how existing fire protection systems are to be maintained; deletes the alteration provisions of 704.1; removes the inspection, testing, and maintenance of fire protection systems since they are already in the SFPC; removes provisions that fall under the jurisdiction of the fire official and belong in the SFPC; and removes invalid retrofit provisions in the International Property Maintenance Code; and

(xxxiv) updates standards incorporated into the regulation by reference.

13VAC5-63-10. Chapter 1 Administration; Section 101 General.

A. Section 101.1 Short title. The Virginia Uniform Statewide Building Code, Part I, Construction, may be cited as the Virginia Construction Code or as the VCC. The term "USBC" shall mean the VCC unless the context in which the term is used clearly indicates it to be an abbreviation for the entire Virginia Uniform Statewide Building Code or for a different part of the Virginia Uniform Statewide Building Code.

Note: This code is also known as the ~~2018~~ 2021 edition of the USBC due to the use of the ~~2018~~ 2021 editions of the model codes.

B. Section 101.2 Incorporation by reference. Chapters 2 - 35 of the ~~2018~~ 2021 International Building Code, published by the International Code Council, Inc., are adopted and incorporated by reference to be an enforceable part of the USBC. The term "IBC" means the ~~2018~~ 2021 International Building Code, published by the International Code Council, Inc. Any codes and standards referenced in the IBC are also considered to be part of the incorporation by reference, except that such codes and standards are used only to the prescribed extent of each such reference. In addition, any provisions of the appendices of the IBC specifically identified to be part of the USBC are also considered to be part of the incorporation by reference.

Note 1: The IBC references other International Codes and standards, including the following major codes:

~~2018~~ 2021 International Plumbing Code (IPC)

~~2018~~ 2021 International Mechanical Code (IMC)

~~2017~~ 2020 National Fire Protection Association (NFPA) 70

~~2018~~ 2021 International Fuel Gas Code (IFGC)

~~2018~~ 2021 International Energy Conservation Code (IECC)

~~2018~~ 2021 International Residential Code (IRC)

Note 2: The IRC is applicable to the construction of detached one-family and two-family dwellings and townhouses as set out in Section 310.

C. Section 101.3 Numbering system. A dual numbering system is used in the USBC to correlate the numbering system of the Virginia Administrative Code with the numbering system of the IBC. IBC numbering system designations are provided in the catchlines of the Virginia Administrative Code sections. Cross references between sections or chapters of the USBC use only the IBC numbering system designations. The term "chapter" is used in the context of the numbering system of the IBC and may mean a chapter in the USBC, a chapter in the IBC, or a chapter in a referenced code or standard, depending on the context of the use of the term. The term "chapter" is not used to designate a chapter of the Virginia Administrative Code, unless clearly indicated.

D. Section 101.4 Arrangement of code provisions. The USBC is comprised of the combination of (i) the provisions of Chapter 1, Administration, which are established ~~herein,~~ in this section; (ii) Chapters 2 – through 35 of the IBC, which are incorporated by reference in Section 101.2~~,~~; and (iii) the changes to the text of the incorporated chapters of the IBC that are specifically identified. The terminology "changes to the text of the incorporated chapters of the IBC that are specifically identified" shall also be referred to as the "state amendments to the IBC." Such state amendments to the IBC are set out using corresponding chapter and section numbers of the IBC numbering system. In addition, since Chapter 1 of the IBC is not incorporated as part of the USBC, any reference to a provision of Chapter 1 of the IBC in the provisions of Chapters 2 – through 35 of the IBC is generally invalid. However, where the purpose of such a reference would clearly correspond to a provision of Chapter 1 established ~~herein~~ in this section, then the reference may be construed to be a valid reference to such corresponding Chapter 1 provision.

E. Section 101.5 Use of terminology and notes. The provisions of this code shall be used as follows:

1. The term "this code," or "the code," where used in the provisions of Chapter 1, in Chapters 2 – through 35 of the IBC or in the state amendments to the IBC means the USBC, unless the context clearly indicates otherwise.

2. The term "this code," or "the code," where used in a code or standard referenced in the IBC means that code or standard, unless the context clearly indicates otherwise.

3. The use of notes in Chapter 1 is to provide information only and shall not be construed as changing the meaning of any code provision.

4. Notes in the IBC, in the codes and standards referenced in the IBC and in the state amendments to the IBC may modify the content of a related provision and shall be considered to be a valid part of the provision, unless the context clearly indicates otherwise.

5. References to International Codes and standards, where used in this code, include state amendments made to those International Codes and standards in the VCC.

F. Section 101.6 Order of precedence. The provisions of this code shall be used as follows:

1. The provisions of Chapter 1 of this code supersede any provisions of Chapters 2 – through 35 of the IBC that address the same subject matter and impose differing requirements.

2. The provisions of Chapter 1 of this code supersede any provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements.

3. The state amendments to the IBC supersede any provisions of Chapters 2 – through 35 of the IBC that address the same subject matter and impose differing requirements.

4. The state amendments to the IBC supersede any provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements.

5. The provisions of Chapters 2 – through 35 of the IBC supersede any provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements.

6. The provisions of the National Electrical Code (NEC), Virginia Maintenance Code (VMC), Virginia Plumbing Code (VPC), and Virginia Fuel Gas Code (VFGC) supersede any provisions of the Virginia Energy Conservation Code (VECC) that address the same subject matter and impose differing requirements.

7. The provisions of Chapters 2 through 10 and 12 through 44 of the VRC supersede any provisions of Chapter 11 of the VRC that address the same subject matter and impose differing requirements.

G. Section 101.7 Administrative provisions. The provisions of Chapter 1 establish administrative requirements, which include provisions relating to the scope of the code, enforcement, fees, permits, inspections and disputes. Any provisions of Chapters 2 – through 35 of the IBC or any provisions of the codes and standards referenced in the IBC that address the same subject matter and impose differing requirements are deleted and replaced by the provisions of Chapter 1. Further, any administrative requirements contained in the state amendments to the IBC shall be given the same precedence as the provisions of Chapter 1. Notwithstanding the ~~above~~ provisions of this subsection, where administrative requirements of Chapters 2 – through 35 of the IBC or of the codes and standards referenced in the IBC are specifically identified as valid administrative requirements in Chapter 1 of this code or in the state amendments to the IBC, then such requirements are not deleted and replaced.

Note: The purpose of this provision is to eliminate overlap, conflicts, and duplication by providing a single standard for administrative, procedural, and enforcement requirements of this code.

H. Section 101.8 Definitions. The definitions of terms used in this code are contained in Chapter 2 along with specific provisions addressing the use of definitions. Terms may be defined in other chapters or provisions of the code and such definitions are also valid.

Note: The order of precedence outlined in Section 101.6 may be determinative in establishing how to apply the definitions in the IBC and in the referenced codes and standards.

13VAC5-63-20. Section 102 Purpose and scope.

A. Section 102.1 Purpose. In accordance with § 36-99 of the Code of Virginia, the purpose of the USBC is to protect the health, safety, and welfare of the residents of the Commonwealth of Virginia, provided that buildings and structures should be permitted to be constructed at the least possible cost consistent with recognized standards of health, safety, energy conservation, and water conservation, including provisions necessary to prevent overcrowding, rodent or insect infestation, and garbage accumulation; and include barrier-free provisions for the physically handicapped and aged.

B. Section 102.2 Scope. This section establishes the scope of the USBC in accordance with § 36-98 of the Code of Virginia. The USBC shall supersede the building codes and regulations of the counties, municipalities, and other political subdivisions and state agencies. This code also shall supersede the provisions of local ordinances applicable to single-family residential construction that (i) regulate dwelling foundations or crawl spaces; (ii) require the use of specific building materials or finishes in construction; or (iii) require minimum surface area or numbers of windows; however, this code shall not supersede proffered conditions accepted as a part of a rezoning application, conditions imposed upon the grant of special exceptions, special or conditional use permits or variances, conditions imposed upon a clustering of single-family homes and preservation of open space development through standards, conditions, and criteria established by a locality pursuant to subdivision 8 of § 15.2-2242 of the Code of Virginia or § 15.2-2286.1 of the Code of Virginia, or land use requirements in airport or highway overlay districts, or historic districts created pursuant to § 15.2-2306 of the Code of Virginia, or local flood plain regulations adopted as a condition of participation in the National Flood Insurance Program.

Note: Requirements relating to functional design are contained in Section 103.5 of this code.

C. Section 102.2.1 Invalidity of provisions. To the extent that any provisions of this code are in conflict with Chapter 6 (§ 36-97 et seq.) of Title 36 of the Code of Virginia or in conflict with the scope of the USBC, those provisions are considered to be invalid to the extent of such conflict.

D. Section 102.3 Exemptions. The following are exempt from this code:

1. Equipment and wiring used for providing utility, communications, information, cable television, broadcast, or radio service in accordance with all of the following conditions:

1.1. The equipment and wiring are located on either rights-of-way or property for which the service provider has rights of occupancy and entry.

1.2. Buildings housing exempt equipment and wiring shall be subject to the USBC.

1.3. The equipment and wiring exempted by this section shall not create an unsafe condition prohibited by the USBC.

2. Support structures owned or controlled by a provider of publicly regulated utility service or its affiliates for the transmission and distribution of electric service in accordance with all of the following conditions:

2.1. The support structures are located on either rights-of-way or property for which the service provider has rights of occupancy and entry.

2.2. The support structures exempted by this section shall not create an unsafe condition prohibited by the USBC.

3. Direct burial poles used to support equipment or wiring providing communications, information, or cable television services. The poles exempted by this section shall not create an unsafe condition prohibited by the USBC.

4. Electrical equipment, transmission equipment, and related wiring used for wireless transmission of radio, broadcast, telecommunications, or information service in accordance with all of the following conditions:

4.1. Buildings housing exempt equipment and wiring and structures supporting exempt equipment and wiring shall be subject to the USBC.

4.2. The equipment and wiring exempted by this section shall not create an unsafe condition prohibited by the USBC.

5. Manufacturing, processing, and product handling machines and equipment that do not produce or process hazardous materials regulated by this code, including those portions of conveyor systems used exclusively for the transport of associated materials or products, and all of the following service equipment:

5.1. Electrical equipment connected after the last disconnecting means.

5.2. Plumbing piping and equipment connected after the last shutoff valve or backflow device and before the equipment drain trap.

5.3. Gas piping and equipment connected after the outlet shutoff valve.

Manufacturing and processing machines that produce or process hazardous materials regulated by this code are only required to comply with the code provisions regulating the hazardous materials.

6. Parking lots and sidewalks that are not part of an accessible route.

7. ~~Nonmechanized playground~~ Playground or recreational equipment, such as swing sets, sliding boards, climbing bars, jungle gyms, skateboard ramps, and similar equipment ~~where no admission fee is charged for its use or for admittance to areas where the equipment is located~~.

However, play structures installed inside all occupancies covered by this code shall be subject to the play structures section in VCC chapter 4.

8. Industrialized buildings subject to the Virginia Industrialized Building Safety Regulations (13VAC5-91) and manufactured homes subject to the Virginia Manufactured Home Safety Regulations (13VAC5-95); except as provided for in Section ~~427~~ 429 and in the case of demolition of such industrialized buildings or manufactured homes.

9. Farm buildings and structures, except for a building or a portion of a building located on a farm that is operated as a restaurant as defined in § 35.1-1 of the Code of Virginia and licensed as such by the Virginia State Board of Health pursuant to Chapter 2 (§ 35.1-11 et seq.) of Title 35.1 of the Code of Virginia. However, farm buildings and structures lying within a flood plain or in a mudslide-prone area shall be subject to flood-proofing regulations or mudslide regulations, as applicable.

10. Federally owned buildings and structures unless federal law specifically requires a permit from the locality. Underground storage tank installations, modifications, and removals shall comply with this code in accordance with federal law.

11. Off-site manufactured intermodal freight containers, moving containers, and storage containers placed on site temporarily or permanently for use as a storage container.

12. Automotive lifts.

13VAC5-63-30. Section 103 Application of code.

A. Section 103.1 General. In accordance with § 36-99 of the Code of Virginia, the USBC shall prescribe building regulations to be complied with in the construction and rehabilitation of buildings and structures, and the equipment therein.

B. Section 103.1.1 Virginia Existing Building Code. Part II of the Virginia Uniform Statewide Building Code, also known as the "Virginia Existing Building Code," or the "VEBC" is applicable to construction and rehabilitation activities in existing buildings and structures, as those terms are defined in the VEBC, except where specifically addressed in the VCC.

C. Section 103.2 When applicable to construction. Construction for which a permit application is submitted to the local building department on or after the effective date of the ~~2018~~ 2021 edition of the code shall comply with the provisions of this code, except for permit applications submitted during a one-year period beginning on the effective date of the ~~2018~~ 2021 edition of the code. The applicant for a permit during such one-year period shall be permitted to choose whether to comply with the provisions of this code or the provisions of the edition of the code in effect immediately prior to the ~~2018~~ 2021 edition. This provision shall also apply to subsequent amendments to this code based on the effective date of such amendments. In addition, when a permit has been properly issued under a previous edition of this code, this code shall not require changes to the approved construction documents, design, or construction of such a building or structure, provided the permit has not been suspended or revoked.

D. Section 103.3 Nonrequired equipment. The following criteria for nonrequired equipment is in accordance with § 36-103 of the Code of Virginia. Building owners may elect to install partial or full fire alarms or other safety equipment that was not required by the edition of the USBC in effect at the time a building was constructed without meeting current requirements of the code, provided the installation does not create a hazardous condition. Permits for installation shall be obtained in accordance with this code. In addition, as a requirement of this code, when such nonrequired equipment is to be installed, the building official shall notify the appropriate fire official or fire chief.

E. Section 103.3.1 Reduction in function or discontinuance of nonrequired fire protection systems. When a nonrequired fire protection system is to be reduced in function or discontinued, it shall be done in such a manner so as not to create a false sense of protection. Generally, in such cases, any features visible from interior areas shall be removed, such as sprinkler heads, smoke detectors, or alarm panels or devices, but any wiring or piping hidden within the construction of the building may remain. Approval of the proposed method of reduction or discontinuance shall be obtained from the building official.

F. Section 103.4 Use of certain provisions of referenced codes. The following provisions of the IBC and of other indicated codes or standards are to be considered valid provisions of this code. Where any such provisions have been modified by the state amendments to the IBC, then the modified provisions apply.

1. Special inspection requirements in Chapters 2 ~~-~~ through 35.

2. Testing requirements and requirements for the submittal of construction documents in any of the ICC codes referenced in Chapter 35 and in the IRC.

3. Section R301.2 of the IRC authorizing localities to determine climatic and geographic design criteria.

4. Flood load or flood-resistant construction requirements in the IBC or the IRC, including any such provisions pertaining to flood elevation certificates that are located in Chapter 1 of those codes. Any required flood elevation certificate pursuant to such provisions shall be prepared by a land surveyor licensed in Virginia or a registered design professional (RDP).

~~5. Section R101.2 of the IRC.~~

~~6.~~ 5. Section N1102.1 of the IRC and Sections C402.1.1, C402.1.1.1, and R402.1 of the IECC.

G. Section 103.5 Functional design. The following criteria for functional design is in accordance with § 36-98 of the Code of Virginia. The USBC shall not supersede the regulations of other state agencies that require and govern the functional design and operation of building related activities not covered by the USBC, including (i) public water supply systems, (ii) waste water treatment and disposal systems, and (iii) solid waste facilities. Nor shall state agencies be prohibited from requiring, pursuant to other state law, that buildings and equipment be maintained in accordance with provisions of this code. In addition, as established by this code, the building official may refuse to issue a permit until the applicant has supplied certificates of functional design approval from the appropriate state agency ~~or agencies~~. For purposes of coordination, the locality may require reports to the building official by other departments or agencies indicating compliance with their regulations applicable to the functional design of a building or structure as a condition for issuance of a building permit or certificate of occupancy. Such reports shall be based upon review of the plans or inspection of the project as determined by the locality. All enforcement of these conditions shall not be the responsibility of the building official, but rather the agency imposing the condition.

Note: Identified state agencies with functional design approval are listed in the "Related Laws Package," which is available from DHCD.

H. Section 103.6 Amusement devices and inspections. In accordance with § 36-98.3 of the Code of Virginia, to the extent they are not superseded by the provisions of § 36-98.3 of the Code of Virginia and the VADR, the provisions of the USBC shall apply to amusement devices. In addition, as a requirement of this code, inspections for compliance with the VADR shall be conducted either by local building department personnel or private inspectors provided such persons are certified as amusement device inspectors under the VCS.

I. Section 103.7 State buildings and structures. This section establishes the application of the USBC to state-owned buildings and structures in accordance with § 36-98.1 of the Code of Virginia. The USBC shall be applicable to all state-owned buildings and structures, with the exception that §§ 2.2-1159 through 2.2-1161 of the Code of Virginia shall provide the standards for ready access to and use of state-owned buildings by the physically handicapped.

Any state-owned building or structure or building built on state-owned property for which preliminary plans were prepared or on which construction commenced after the initial effective date of the USBC, shall remain subject to the provisions of the USBC that were in effect at the time such plans were completed or such construction commenced. Subsequent reconstruction, renovation, or demolition of such building or structure shall be subject to the pertinent provisions of this code.

Acting through the Division of Engineering and Buildings, the Virginia Department of General Services shall function as the building official for state-owned buildings. The department shall review and approve plans and specifications, grant modifications, and establish such rules and regulations as may be necessary to implement this section. It shall provide for the inspection of state-owned buildings and enforcement of the USBC and standards for access by the physically handicapped by delegating inspection and USBC enforcement duties to the State Fire Marshal's Office, to other appropriate state agencies having needed expertise, and to local building departments, all of which shall provide such assistance within a reasonable time and in the manner requested. State agencies and institutions occupying buildings shall pay to the local building department the same fees as would be paid by a private citizen for the services rendered when such services are requested by the department. The department may alter or overrule any decision of the local building department after having first considered the local building department's report or other rationale given for its decision. When altering or overruling any decision of a local building department, the department shall provide the local building department with a written summary of its reasons for doing so.

Notwithstanding any provision of this code to the contrary, roadway tunnels and bridges owned by the Virginia Department of Transportation shall be exempt from this code. The Virginia Department of General Services shall not have jurisdiction over such roadway tunnels, bridges, and other limited access highways; provided, however, that the Department of General Services shall have jurisdiction over any occupied buildings within any Department of Transportation rights-of-way that are subject to this code.

Except as provided in subsection E of § 23.1-1016 of the Code of Virginia, and notwithstanding any provision of this code to the contrary, at the request of a public institution of higher education, the Virginia Department of General Services, as further set forth in this provision, shall authorize that institution of higher education to contract with a building official of the locality in which the construction is taking place to perform any inspection and certifications required for the purpose of complying with this code. The department shall publish administrative procedures that shall be followed in contracting with a building official of the locality. The authority granted to a public institution of higher education under this provision to contract with a building official of the locality shall be subject to the institution meeting the conditions prescribed in subsection A of § 23.1-1002 of the Code of Virginia.

Note: In accordance with § 36-98.1 of the Code of Virginia, roadway tunnels and bridges shall be designed, constructed, and operated to comply with fire safety standards based on nationally recognized model codes and standards to be developed by the Virginia Department of Transportation in consultation with the State Fire Marshal. Emergency response

planning and activities related to the standards shall be developed by the Department of Transportation and coordinated with the appropriate local officials and emergency service providers. On an annual basis, the Department of Transportation shall provide a report on the maintenance and operability of installed fire protection and detection systems in roadway tunnels and bridges to the State Fire Marshal.

J. Section 103.7.1 Certification of state enforcement personnel. State enforcement personnel shall comply with the applicable requirements of Section 105 for certification.

13VAC5-63-70. Section 107 Fees.

A. Section 107.1 Authority for charging fees. In accordance with § 36-105 of the Code of Virginia, fees may be levied by the local governing body in order to defray the cost of enforcement of the USBC. With the exception of the levy collected pursuant to Section 107.2, fees levied pursuant to this section shall be used only to support the functions of the local building department.

Note: See subsection D of § 36-105 of the Code of Virginia for rules for permit fees involving property with easements or liens.

B. Section 107.1.1 Fee schedule. The local governing body shall establish a fee schedule incorporating unit rates, which may be based on square footage, cubic footage, estimated cost of construction, or other appropriate criteria. A permit or any amendments to an existing permit shall not be issued until the designated fees have been paid, except that the building official may authorize the delayed payment of fees.

C. Section 107.1.2 Refunds. When requested in writing by a permit holder, the locality shall provide a fee refund in the case of the revocation of a permit or the abandonment or ~~discontinuance~~ cancellation of a building project. The refund shall not be required to exceed an amount ~~which~~ that correlates to work not completed.

D. Section 107.1.3 Fees for generators used with amusement devices. Fees for generators and associated wiring used with amusement devices shall only be charged under the Virginia Amusement Device Regulations (13VAC5-31).

E. Section 107.2 Code academy fee levy. In accordance with subdivision 7 of § 36-137 of the Code of Virginia, the local building department shall collect a 2.0% levy of fees charged for permits issued under this code and transmit it quarterly to DHCD to support training programs of the Virginia Building Code Academy. Localities that maintain individual or regional training academies accredited by DHCD shall retain such levy.

13VAC5-63-80. Section 108 Application for permit.

A. Section 108.1 When applications are required. Application for a permit shall be made to the building official and a permit shall be obtained prior to the commencement of any of the following activities, except that applications for emergency construction, alterations, or equipment replacement shall be submitted by the end of the first working day that follows the day such work commences. In addition, the building official may authorize work to commence pending the receipt of an application or the issuance of a permit.

1. Construction or demolition of a building or structure. Installations or alterations involving (i) the removal or addition of any wall, partition, or portion thereof; (ii) any structural component; (iii) the repair or replacement of any required component of a fire or smoke rated assembly; (iv) the alteration of any required means of egress system, including the addition or removal of emergency supplemental hardware; (v) water supply and distribution system, sanitary drainage system, or vent system; (vi) electric wiring; (vii) fire protection system, mechanical systems, or fuel supply systems; or (viii) any equipment regulated by the USBC.

2. For change of occupancy, application for a permit shall be made when a new certificate of occupancy is required by the VEBC.

3. Movement of a lot line that increases the hazard to or decreases the level of safety of an existing building or structure in comparison to the building code under which such building or structure was constructed.

4. Removal or disturbing of any asbestos containing materials during the construction or demolition of a building or structure, including additions.

B. Section 108.2 Exemptions from application for permit. Notwithstanding the requirements of Section 108.1, application for a permit and any related inspections shall not be required for the following; however, this section shall not be construed to exempt such activities from other applicable requirements of this code. In addition, when an owner or an owner's agent requests that a permit be issued for any of the following, then a permit shall be issued and any related inspections shall be required.

1. Installation of wiring and equipment that (i) operates at less than 50 volts, (ii) is for broadband communications systems, (iii) is exempt under Section 102.3(1) or 102.3(4), or (iv) is for monitoring or automation systems in dwelling units, except when any such installations are located in a plenum, penetrate fire rated or smoke protected construction, or are a component of any of the following:

1.1. Fire alarm system.

1.2. Fire detection system.

1.3. Fire suppression system.

1.4. Smoke control system.

1.5. Fire protection supervisory system.

1.6. Elevator fire safety control system.

1.7. Access or egress control system or delayed egress locking or latching system.

1.8. Fire damper.

1.9. Door control system.

2. One story detached structures used as tool and storage sheds, playhouses, or similar uses, provided the building area does not exceed 256 square feet (23.78 m^2) and the structures are not classified as a Group F-1 or H occupancy.

3. Detached prefabricated buildings housing the equipment of a publicly regulated utility service, provided the floor area does not exceed 150 square feet (14 m^2).

4. Tents ~~or~~, air-supported structures, or both~~,~~ that cover an area of 900 square feet (84 m^2) or less, including within that area all connecting areas or spaces with a common means of egress or entrance, provided such tents or structures have an occupant load of 50 or less persons.

5. Fences of any height unless required for pedestrian safety as provided for by Section 3306~~,~~ or used for the barrier for a swimming pool.

6. Concrete or masonry walls, provided such walls do not exceed six feet in height above the finished grade. Ornamental column caps shall not be considered to contribute to the height of the wall and shall be permitted to extend above the six feet height measurement.

7. Retaining walls supporting less than three feet of unbalanced fill that are not constructed for the purpose of impounding Class I, II, or III-A liquids or supporting a surcharge other than ordinary unbalanced fill.

8. Swimming pools that have a surface area not greater than 150 square feet (13.95 m^2)~~, do not exceed 5,000 gallons (19,000 L)~~ and are less than 24 inches (610 mm) deep.

9. Signs under the conditions in Section H101.2 of Appendix H.

10. Replacement of ~~above ground~~ aboveground existing LP-gas containers of the same capacity in the same location and associated regulators when installed by the serving gas supplier.

11. Flagpoles 30 feet (9144 mm) or less in height.

12. Temporary ramps serving dwelling units in Groups R-3 and R-5 occupancies where the height of the entrance served by the ramp is no more than 30 inches (762 mm) above grade.

13. Construction work deemed by the building official to be minor and ordinary and ~~which~~ that does not adversely affect public health or general safety.

14. Ordinary repairs that include the following:

14.1. Replacement of windows and doors with windows and doors of similar operation and opening dimensions that do not require changes to the existing framed opening and that are not required to be fire rated in Group R-2 where serving a single dwelling unit and in Groups R-3, R-4, and R-5.

14.2. Replacement of plumbing fixtures and well pumps in all groups without alteration of the water supply and distribution systems, sanitary drainage systems, or vent systems.

14.3. Replacement of general use snap switches, dimmer and control switches, 125 volt-15 or 20 ampere receptacles, luminaires (lighting fixtures), and ceiling (paddle) fans in Group R-2 where serving a single dwelling unit and in Groups R-3, R-4, and R-5.

14.4. Replacement of mechanical appliances provided such equipment is not fueled by gas or oil in Group R-2 where serving a single-family dwelling and in Groups R-3, R-4, and R-5.

14.5. Replacement of an unlimited amount of roof covering or siding in Group R-3, R-4, or R-5 provided the building or structure is not in an area where the nominal design wind speed is greater than 100 miles per hour (44.7 meters per second) and replacement of 100 square feet (9.29 m^2) or less of roof covering in all groups and all wind zones.

14.6. Replacement of 256 square feet (23.78 m^2) or less of roof decking in Group R-3, R-4, or R-5 unless the decking to be replaced was required at the time of original construction to be fire-retardant-treated or protected in some other way to form a fire-rated wall termination.

14.7. Installation or replacement of floor finishes in all occupancies.

14.8. Replacement of Class C interior wall or ceiling finishes installed in Groups A, E, and I and replacement of all classes of interior wall or ceiling finishes in other groups.

14.9. Installation or replacement of cabinetry or trim.

14.10. Application of paint or wallpaper.

14.11. Other repair work deemed by the building official to be minor and ordinary which does not adversely affect public health or general safety.

15. Crypts, mausoleums, and columbaria structures not exceeding 1,500 square feet (139.35 m^2) in area if the building or structure is not for occupancy and used solely for the interment of human or animal remains and is not subject to special inspections.

16. Billboard safety upgrades to add or replace steel catwalks, steel ladders, or steel safety cable.

Exceptions:

1. Application for a permit may be required by the building official for the installation of replacement siding, roofing, and windows in buildings within a historic district designated by a locality pursuant to § 15.2-2306 of the Code of Virginia.

2. Application for a permit may be required by the building official for any items exempted in this section that are located in a special flood hazard area.

C. Section 108.3 Applicant information, processing by mail. Application for a permit shall be made by the owner or lessee of the relevant property or the agent of either or by the RDP, contractor, or subcontractor associated with the work or any of their agents. The full name and address of the owner, lessee, and applicant shall be provided in the application. If the owner or lessee is a corporate body, when and to the extent determined necessary by the building official, the full name and address of the responsible officers shall also be provided.

A permit application may be submitted by mail and such permit applications shall be processed by mail, unless the jurisdiction offers an online permit option for permit application and processing or the permit applicant voluntarily chooses otherwise. In no case shall an applicant be required to appear in person.

The building official may accept applications for a permit through electronic submissions provided the information required by this section is obtained.

D. Section 108.4 Prerequisites to obtaining permit. In accordance with § 54.1-1111 of the Code of Virginia, any person applying to the building department for the construction, removal, or improvement of any structure shall furnish prior to the issuance of the permit either (i) satisfactory proof to the building official that ~~he~~ the person is duly licensed or certified under the terms or Chapter 11 ~~(§ 54.1-1000~~ (§ 54.1-1100 et seq.) of Title 54.1 of the Code of Virginia to carry out or superintend the same or (ii) file a written statement that ~~he~~ the person is not subject to licensure or certification as a contractor or subcontractor pursuant to Chapter 11 of Title 54.1 of the Code of Virginia. The applicant shall also furnish satisfactory proof that the taxes or license fees required by any county, city, or town have been paid so as to be qualified to bid upon or contract for the work for which the permit has been applied.

E. Section 108.5 Mechanics' lien agent designation. In accordance with § 36-98.01 of the Code of Virginia, a building permit issued for any one-family or two-family residential dwelling shall at the time of issuance contain, at the request of the applicant, the name, mailing address, and telephone number of the mechanics' lien agent as defined in § 43-1 of the Code of Virginia. If the designation of a mechanics' lien agent is not so requested by the applicant, the building permit shall at the time of issuance state that none has been designated with the words "None Designated."

Note: In accordance with § ~~43-4.01A~~ 43-4.01 A of the Code of Virginia, a permit may be amended after it has been initially issued to name a mechanics' lien agent or a new mechanics' lien agent.

F. Section 108.6 Application form, description of work. The application for a permit shall be submitted on a form supplied by the local building department. The application shall contain a general description and location of the proposed work and such other information as determined necessary by the building official.

G. Section 108.7 Amendments to application. An application for a permit may be amended at any time prior to the completion of the work governed by the permit. Additional construction documents or other records may also be submitted in a like manner. All such submittals shall have the same effect as if filed with the original application for a permit and shall be retained in a like manner as the original filings.

H. Section 108.8 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned six months after the date of filing unless such application has been pursued in good faith or a permit has been issued, except that the building official is authorized to grant one or more extensions of time if a justifiable cause is demonstrated.

13VAC5-63-100. Section 110 Permits.

A. Section 110.1 Approval and issuance of permits. The building official shall examine or cause to be examined all applications for permits or amendments to such applications within a reasonable time after filing. If the applications or amendments do not comply with the provisions of this code or all pertinent laws and ordinances, the permit shall not be issued and the permit applicant shall be notified in writing of the reasons for not issuing the permit. If the application complies with the applicable requirements of this code, a permit shall be issued as soon as practicable. The issuance of permits shall not be delayed in an effort to control the pace of construction of new detached ~~one-~~ one-family or two-family dwellings.

B. Section 110.1.1 Consultation and notification. Prior to approval or removal of emergency supplemental hardware, the building code official shall consult with the local fire code official, or state fire code official if no local fire code official exists, and head of the local law-enforcement agency. The local fire code official; the state fire code official; and the local fire, EMS, and law-enforcement first responders shall be notified by the building code official of such approval or removal after approval or removal of such emergency supplemental hardware ~~by the building code official~~.

C. Section 110.2 Types of permits. Separate or combined permits may be required for different areas of construction, such as building construction, plumbing, electrical, and mechanical work, or for special construction as determined appropriate by the locality. In addition, permits for two or more buildings or structures on the same lot may be combined. Annual permits may also be issued for any construction regulated by this code. The annual permit holder shall maintain a detailed record of all alterations made under the annual

permit. Such record shall be available to the building official and shall be submitted to the local building department if requested by the building official.

D. Section 110.3 Asbestos inspection in buildings to be renovated or demolished; exceptions. In accordance with § 36-99.7 of the Code of Virginia, the local building department shall not issue a building permit allowing a building for which an initial building permit was issued before January 1, 1985, to be renovated or demolished until the local building department receives certification from the owner or ~~his~~ the owner's agent that the affected portions of the building have been inspected for the presence of asbestos by an individual licensed to perform such inspections pursuant to § 54.1-503 of the Code of Virginia and that no asbestos-containing materials were found or that appropriate response actions will be undertaken in accordance with the requirements of the Clean Air Act National Emission Standard for the Hazardous Air Pollutant (NESHAPS) (40 CFR Part 61, Subpart M), and the asbestos worker protection requirements established by the U.S. Occupational Safety and Health Administration for construction workers (29 CFR 1926.1101). Local educational agencies that are subject to the requirements established by the Environmental Protection Agency under the Asbestos Hazard Emergency Response Act (AHERA) shall also certify compliance with 40 CFR Part 763 and subsequent amendments thereto.

To meet the inspection requirements ~~above~~ in this section, except with respect to schools, asbestos inspection of renovation projects consisting only of repair or replacement of roofing, floorcovering, or siding materials may be satisfied by a statement that the materials to be repaired or replaced are assumed to contain friable asbestos and that asbestos installation, removal, or encapsulation will be accomplished by a licensed asbestos contractor.

The provisions of this section shall not apply to single-family dwellings or residential housing with four or fewer units unless the renovation or demolition of such buildings is for commercial or public development purposes. The provisions of this section shall not apply if the combined amount of regulated asbestos-containing material involved in the renovation or demolition is less than 260 linear feet on pipes or less than 160 square feet on other facility components or less than 35 cubic feet off facility components where the length or area could not be measured previously.

An abatement area shall not be reoccupied until the building official receives certification from the owner that the response actions have been completed and final clearances have been measured. The final clearance levels for reoccupancy of the abatement area shall be 0.01 or fewer asbestos fibers per cubic centimeter if determined by Phase Contrast Microscopy analysis (PCM) or 70 or fewer structures per square millimeter if determined by Transmission Electron Microscopy analysis (TEM).

E. Section 110.4 Fire apparatus access road requirements. The permit applicant shall be informed of any requirements for providing or maintaining fire apparatus access roads prior to the issuance of a building permit.

F. Section 110.5 Posting of permits; limitation of approval. A copy of the permit shall be posted on the construction site for public inspection until the work is completed. Such posting shall include the street or lot number if one has been assigned, to be readable from a public way. In addition, each building or structure to which a street number has been assigned shall, upon completion, have the number displayed so as to be readable from the public way.

A permit shall be considered authority to proceed with construction in accordance with this code, the approved construction documents, the permit application, and any approved amendments or modifications. The permit shall not be construed to otherwise authorize the omission or amendment of any provision of this code.

G. Section 110.6 Abandonment of work. A building official shall be permitted to revoke a permit if work on the site authorized by the permit is not commenced within six months after issuance of the permit, or if the authorized work on the site is suspended or abandoned for a period of six months after the permit is issued; however, permits issued for plumbing, electrical, and mechanical work shall not be revoked if the building permit is still in effect. It shall be the responsibility of the permit applicant to prove to the building official that authorized work includes substantive progress, characterized by approved inspections as specified in Section 113.3 of at least one inspection within a period of six months or other evidence that would indicate substantial work has been performed. Upon written request, the building official may grant one or more extensions of time, not to exceed one year per extension.

H. Section 110.7 Single-family dwelling permits. The building official shall be permitted to require a three-year time limit to complete construction of new detached single-family dwellings, additions to detached single-family dwellings, and residential accessory structures. The time limit shall begin from the issuance date of the permit. The building official may grant extensions of time if the applicant can demonstrate substantive progress, characterized by approved inspections as specified in Section 113.3 of at least one inspection within a period of six months or other evidence that would indicate substantial work has been performed.

I. Section 110.8 Revocation of a permit. The building official may revoke a permit or approval issued under this code in the case of any false statement, misrepresentation of fact, abandonment of work, failure to complete construction as required by Section 110.7, noncompliance with provisions of this code and pertinent laws and ordinances, or incorrect information supplied by the applicant in the application or

construction documents on which the permit or approval was based.

J. Section 110.9 Cancellation of permit. The building official shall cancel a permit at the request of the permit holder or the owner. An incomplete building or structure shall not be left as an unsafe building or structure.

13VAC5-63-130. Section 113 Inspections.

A. Section 113.1 General. In accordance with § 36-105 of the Code of Virginia, any building or structure may be inspected at any time before completion~~,~~ and shall not be deemed in compliance until approved by the inspecting authority. Where the construction cost is less than $2,500, however, the inspection may, in the discretion of the inspecting authority, be waived. The building official shall coordinate all reports of inspections for compliance with the USBC, with inspections of fire and health officials delegated such authority, prior to the issuance of an occupancy permit.

B. Section 113.1.1 Equipment required. Any ladder, scaffolding, or test equipment necessary to conduct or witness a requested inspection shall be provided by the permit holder.

C. Section 113.1.2 Duty to notify. When construction reaches a stage of completion that requires an inspection, the permit holder shall notify the building official.

D. Section 113.1.3 Duty to inspect. Except as provided for in Section 113.7, the building official shall perform the requested inspection in accordance with Section 113.6 when notified in accordance with Section 113.1.2.

E. Section 113.2 Prerequisites. The building official may conduct a site inspection prior to issuing a permit. When conducting inspections pursuant to this code, all personnel shall carry proper credentials.

F. Section 113.3 Minimum inspections. The following minimum inspections shall be conducted by the building official when applicable to the construction or permit:

1. Inspection of footing excavations and reinforcement material for concrete footings prior to the placement of concrete.

2. Inspection of foundation systems during phases of construction necessary to ~~assure~~ ensure compliance with this code.

3. Inspection of preparatory work prior to the placement of concrete.

4. Inspection of structural members and fasteners prior to concealment.

5. Inspection of electrical, mechanical and plumbing materials, equipment, and systems prior to concealment.

6. Inspection of energy conservation material prior to concealment.

7. Final inspection.

G. 113.3.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing Group R-5 occupancies, an inspection ~~or inspections~~ shall be conducted to ensure that the connected vent or chimney systems comply with the following:

1. Vent or chimney systems are sized in accordance with the IRC.

2. Vent or chimney systems are clean, free of any obstruction or blockages, defects, or deterioration, and are in operable condition. Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.

H. 113.3.2 Lowest floor elevation. In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in Section ~~1612.5~~ 1612.4 shall be submitted to the building official.

I. 113.3.3 Flood hazard documentation. If located in a flood hazard area, documentation of the elevation of the lowest floor as required in Section ~~1612.5~~ 1612.4 shall be submitted to the building official prior to the final inspection.

J. Section 113.4 Additional inspections. The building official may designate additional inspections and tests to be conducted during the construction of a building or structure and shall so notify the permit holder.

K. Section 113.5 In-plant and factory inspections. When required by the provisions of this code, materials, equipment, or assemblies shall be inspected at the point of manufacture or fabrication. The building official shall require the submittal of an evaluation report of such materials, equipment, or assemblies. The evaluation report shall indicate the complete details of the assembly including a description of the assembly and its components~~,~~ and describe the basis upon which the assembly is being evaluated. In addition, test results and other data as necessary for the building official to determine conformance with the USBC shall be submitted. For factory inspections, an identifying label or stamp permanently affixed to materials, equipment, or assemblies indicating that a factory inspection has been made shall be acceptable instead of a written inspection report, provided the intent or meaning of such identifying label or stamp is properly substantiated.

L. Section 113.6 Approval or notice of defective work. The building official shall either approve the work in writing or give written notice of defective work to the permit holder. Upon request of the permit holder, the notice shall reference the USBC section that serves as the basis for the defects, and such defects shall be corrected and reinspected before any work proceeds that would conceal such defects. A record of all reports of inspections, tests, examinations, discrepancies, and

approvals issued shall be maintained by the building official and shall be communicated promptly in writing to the permit holder. Approval issued under this section may be revoked whenever it is discovered that such approval was issued in error or on the basis of incorrect information, or where there are repeated violations of the USBC. Notices issued pursuant to this section shall be permitted to be communicated electronically, provided the notice is reasonably calculated to get to the permit holder.

M. Section 113.7 Approved inspection agencies. The building official may accept reports of inspections and tests from individuals or inspection agencies approved in accordance with the building official's written policy required by Section 113.7.1. The individual or inspection agency shall meet the qualifications and reliability requirements established by the written policy. Under circumstances where the building official is unable to make the inspection or test required by Section 113.3 or 113.4 within two working days of a request or an agreed upon date or if authorized for other circumstances in the building official's written policy, the building official shall accept reports for review. The building official shall approve the report from such approved individuals or agencies unless there is cause to reject it. Failure to approve a report shall be in writing within two working days of receiving it stating the reason for the rejection. Reports of inspections conducted by approved third-party inspectors or agencies shall be in writing, shall indicate if compliance with the applicable provisions of the USBC have been met, and shall be certified by the individual inspector or by the responsible officer when the report is from an agency. Reports of inspections conducted for the purpose of verifying compliance with the requirements of the USBC for elevators, escalators, and related conveyances shall include the name and certification number of the elevator mechanic performing the tests witnessed by the third-party inspector or agency.

Exception: The licensed mechanical contractor installing the mechanical system shall be permitted to perform duct tests required by Section ~~R403.3.3~~ R403.3.5 of the IECC or Section ~~N1103.3.3~~ N1103.3.5 of the IRC. The contractor shall have been trained on the equipment used to perform the test.

Note: Photographs, videotapes, or other sources of pertinent data or information may be considered as constituting such reports and tests.

N. Section 113.7.1 Third-party inspectors. Each building official charged with the enforcement of the USBC shall have a written policy establishing the minimum acceptable qualifications for third-party inspectors. The policy shall include the format and ~~time frame~~ timeframe required for submission of reports, any prequalification, or preapproval requirements before conducting a third-party inspection and any other requirements and procedures established by the building official.

O. Section 113.7.2 Qualifications. In determining third-party inspector qualifications, the building official may consider such items as DHCD inspector certification, other state or national certifications, state professional registrations, related experience, education, and any other factors that would demonstrate competency and reliability to conduct inspections.

P. Section 113.8 Final inspection. Upon completion of construction for which a permit was issued, a final inspection shall be conducted to ensure that any defective work has been corrected and that all work complies with the USBC and has been approved, including any work associated with modifications under Section 106.3. The building official shall be permitted to require the electrical service to a building or structure to be energized prior to conducting the final inspection. Approval of the final inspection indicates that all work associated with the permit complies with this code, and the permit is complete. Prior to occupancy or change of occupancy of a building or structure, a certificate of occupancy shall be issued in accordance with Section 116.

13VAC5-63-160. Section 116 Certificates of occupancy.

A. Section 116.1 General; when to be issued. Prior to occupancy or change of occupancy of a building or structure, a certificate of occupancy shall be obtained in accordance with this section. The building official shall issue the certificate of occupancy within five working days after approval of the final inspection and when the building or structure or portion thereof is determined to be in compliance with this code and any pertinent laws or ordinances, or when otherwise entitled.

Exceptions:

1. A certificate of occupancy is not required for an accessory structure as defined in the IRC.

2. A new certificate of occupancy is not required for an addition to an existing Group R-5 building that already has a certificate of occupancy.

B. Section 116.1.1 Temporary certificate of occupancy. Upon the request of a permit holder, a temporary certificate of occupancy may be issued before the completion of the work covered by a permit, provided that such portion ~~or portions~~ of a building of structure may be occupied safely prior to full completion of the building or structure without endangering life or public safety.

C. Section 116.2 Contents of certificate. A certificate of occupancy shall specify the following:

1. The edition of the USBC under which the permit is issued.

2. The group classification and occupancy in accordance with the provisions of Chapter 3.

3. The type of construction as defined in Chapter 6.

4. If an automatic sprinkler system is provided and whether or not such system was required.

5. Any special stipulations and conditions of the building permit and if any modifications were issued under the permit, there shall be a notation on the certificate that modifications were issued.

6. Group R-5 occupancies complying with Section ~~R320.2~~ R320.3 of the ~~IRC~~ VRC shall have a notation of compliance with that section on the certificate.

D. Section 116.3 Suspension or revocation of certificate. A certificate of occupancy may be revoked or suspended whenever the building official discovers that such certificate was issued in error or on the basis of incorrect information, or where there are repeated violations of the USBC after the certificate has been issued or when requested by the code official under Section 106.6 of the VMC. The revocation or suspension shall be in writing and shall state the necessary corrections or conditions for the certificate to be reissued or reinstated in accordance with Section 116.3.1.

E. Section 116.3.1 Reissuance or reinstatement of certificate of occupancy. When a certificate of occupancy has been revoked or suspended, it shall be reissued or reinstated upon correction of the specific ~~condition or~~ conditions cited as the cause of the revocation or suspension, and the revocation or suspension of a certificate of occupancy shall not be used as justification for requiring a building or structure to be subject to a later edition of the code than that under which such building or structure was initially constructed.

F. Section 116.4 When no certificate exists. When the local building department does not have a certificate of occupancy for a building or structure, the owner or owner's agent may submit a written request for a certificate to be created. The building official, after receipt of the request, shall issue a certificate provided a determination is made that there are no current violations of the VMC or the Virginia Statewide Fire Prevention Code ~~(13VAC5-51)~~ (13VAC5-52) and the occupancy classification of the building or structure has not changed. Such buildings and structures shall not be prevented from continued use.

When the local building department has records indicating that a certificate did exist but does not have a copy of the certificate itself, then the building official may either verify in writing that a certificate did exist or issue a certificate based upon the records.

13VAC5-63-170. Section 117 Temporary and moved buildings and structures; demolition.

A. Section 117.1 Temporary buildings and structures. The building official is authorized to issue a permit for temporary buildings or structures. Such permits shall be limited as to time of service, but shall not be permitted for more than one year, except that upon the permit holder's written request, the building official may grant one or more extensions of time, not to exceed one year per extension. The building official is authorized to terminate the approval and order the demolition or removal of temporary buildings or structures during the period authorized by the permit when determined necessary.

B. Section 117.1.1 Temporary uses within existing buildings and structures. The building official shall review and may approve conditions or modifications for temporary uses, including hypothermia and hyperthermia shelters, that may be necessary as long as the use meets the spirit and functional intent intended by this code. The building official is authorized to terminate the approval and order the discontinuance of the temporary use during the period authorized by the permit when determined necessary. The building official shall notify the appropriate fire official or fire chief of the approved temporary use.

C. Section 117.2 Moved buildings and structures. Any building or structure moved into a locality or moved to a new location within a locality shall not be occupied or used until the flood hazard documentation, if required by Section ~~1612.5~~ 1612.4 has been approved by the building official and a certificate of occupancy is issued for the new location. Such moved buildings or structures shall be required to comply with the requirements of the VEBC.

D. Section 117.3 Demolition of buildings and structures. Prior to the issuance of a permit for the demolition of any building or structure, the owner or the owner's agent shall provide certification to the building official that all service connections of utilities have been removed, sealed, or plugged satisfactorily and a release has been obtained from the associated utility company. The certification shall further provide that written notice has been given to the owners of adjoining lots and any other lots that may be affected by the temporary removal of utility wires or the temporary disconnection or termination of other services or facilities relative to the demolition. In addition, the requirements of Chapter 33 of the IBC for any necessary retaining walls or fences during demolition shall be applicable and when a building or structure is demolished or removed, the established grades shall be restored.

13VAC5-63-180. Section 118 ~~Unsafe buildings~~ Buildings or structures that become a threat to public safety during construction.

A. Section 118.1 ~~Applicability. This section applies to unsafe buildings or structures~~ General. Any building or structure that is under construction and has not received a permanent certificate of occupancy (CO), or final inspection if a CO will not be issued, that has been determined by the building official to be an immediate threat to public safety due to faulty construction, deterioration, damage, or structural instability shall be made safe through compliance with this code or shall be demolished and removed if determined necessary by the building official.

~~Note: Existing buildings and structures other than those under construction or subject to this section are subject to the VMC, which also has requirements for unsafe conditions.~~

~~B. Section 118.2 Repair or removal of unsafe buildings or structures. Any unsafe building or structure shall be made safe through compliance with this code or shall be taken down and removed if determined necessary by the building official.~~

~~C.~~ B. Section ~~118.3 Inspection report~~ 118.2 Correction notice. The building official shall ~~inspect any reported unsafe building or structure and shall prepare a report to be filed in the records of the local building department. In addition to a description of any unsafe conditions found, the report shall include the occupancy classification of the building or structure and the nature and extent of any damages caused by collapse or failure of any building components~~ issue a correction notice that describes the condition of the structure that is the basis for the determination that a violation of Section 118 exists. The correction notice shall state what is required to correct the violation and provide a reasonable time to make the corrections, or if the structure is required to be demolished, the notice shall specify the time period within which the demolition must occur.

~~D.~~ C. Section ~~118.4~~ 118.3 Notice of ~~unsafe building or structure~~ violation. When ~~a building or structure is determined by the building official to be an unsafe building or structure, a written notice of unsafe building or structure shall be issued by personal service to the owner, the owner's agent, or the person in control of such building or structure. The notice shall specify the corrections necessary to comply with this code and specify the time period within which the repairs must occur, or if the notice specifies that the unsafe building or structure is required to be demolished, the notice shall specify the time period within which demolition must occur~~ the violation has not been corrected in accordance with the correction notice issued per Section 118.2, the building official is authorized to issue a notice of violation in accordance with Section 115 of this code.

~~Note: Whenever possible, the notice should also be given to any tenants or occupants of the unsafe building or structure.~~

~~E.~~ D. Section ~~118.4.1~~ 118.3.1 Vacating unsafe building or structure. If the building official determines there is actual and immediate danger to the occupants or public, or when life is endangered by the occupancy of an unsafe building or structure, the building official shall be authorized to order the occupants to immediately vacate the unsafe building or structure. When an unsafe building or structure is ordered to be vacated, the building official shall post a notice at each entrance that reads as follows:

"This Building (or Structure) is Unsafe and its Occupancy (or Use) is Prohibited by the Building Official."

After posting, occupancy or use of the unsafe building or structure shall be prohibited except when authorized to enter to conduct inspections, make required repairs, or as necessary to demolish the building or structure.

~~F.~~ E. Section ~~118.5~~ 118.4 Posting of notice. ~~If the notice is unable to be issued by personal service as required by Section 118.4, then the~~ The notice shall be sent by registered or certified mail to the last known address of the responsible party and a copy of the notice shall be posted in a conspicuous place on the premises.

~~G.~~ F. Section ~~118.6~~ 118.5 Posting of placard. In the case of an unsafe building or structure, if the notice is not complied with, a placard with the following wording shall be posted at the entrance to the building or structure:

"This Building (or Structure) is Unfit for Habitation and its Use or Occupancy has been Prohibited by the Building Official."

After an unsafe building or structure is placarded, entering the unsafe building or structure shall be prohibited except as authorized by the building official to make inspections, to perform required repairs, or to demolish the unsafe building or structure. In addition, the placard shall not be removed until the unsafe building or structure is determined by the building official to be safe to occupy. The placard shall not be defaced.

~~H.~~ G. Section ~~118.7~~ 118.6 Emergency repairs and demolition. To the extent permitted by the locality, the building official may authorize emergency repairs ~~to unsafe buildings or structures when~~ or securing of the site when it is determined that there is an ~~immediate danger of any portion of the unsafe building or structure collapsing or falling and when life is endangered. Emergency repairs may also be authorized when there is a code violation resulting in a serious and~~ imminent threat to the life and safety of the ~~occupants or~~ public. The building official shall be permitted to authorize the necessary work to make the ~~unsafe building or~~ structure temporarily safe whether or not legal action to compel compliance has been instituted.

In addition, ~~whenever an owner of an unsafe building or structure fails to comply with a notice to demolish issued under Section 118.4 in the~~ if the notice of violation included an order to demolish the structure and the demolition has not occurred in the time period stipulated, the building official shall be permitted to cause the unsafe ~~building or~~ structure to be demolished. In accordance with §§ 15.2-906 and 15.2-1115 of the Code of Virginia, the legal counsel of the locality may be requested to institute appropriate action against the property owner to recover the costs associated with any such emergency repairs or demolition and every such charge that remains unpaid shall constitute a lien against the property on which the emergency repairs or demolition were made and shall be enforceable in the same manner as provided in Articles 3 (§ 58.1-3940 et seq.) and 4 (§ 58.1-3965 et seq.) of Chapter 39 of Title 58.1 of the Code of Virginia.

Note: Building officials and local governing bodies should be aware that other statutes and court decisions may impact on matters relating to demolition, in particular whether newspaper publication is required if the owner cannot be located and whether the demolition order must be delayed until the owner has been given the opportunity for a hearing.

~~I.~~ H. Section ~~118.8~~ 118.7 Closing of streets. When necessary for public safety, the building official shall be permitted to order the temporary closing of sidewalks, streets, public ways, or premises adjacent to ~~unsafe buildings or structures and prohibit the use of such spaces~~ a structure that has become a threat to public safety during construction.

13VAC5-63-200. Chapter 2 Definitions.

A. Add the following definitions to Section 202 of the IBC to read:

Aboveground liquid fertilizer storage tank (ALFST). A device that contains an accumulation of liquid fertilizer (i) constructed of nonearthen materials, such as concrete, steel, or plastic, that provide structural support; (ii) having a capacity of 100,000 gallons (378,500 L) or greater~~;~~ and (iii) the volume of which is more than 90% above the surface of the ground. The term does not include any wastewater treatment or wastewater storage tank, utility, or industry pollution control equipment.

Building regulations. Any law, rule, resolution, regulation, ordinance, or code, general or special, or compilation thereof~~, heretofore or hereafter~~ enacted or adopted by the Commonwealth or any county or municipality, including departments, boards, bureaus, commissions, or other agencies thereof~~,~~ relating to construction, reconstruction, alteration, conversion, repair, maintenance, or use of structures and buildings and installation of equipment therein. The term does not include zoning ordinances or other land use controls that do not affect the manner of construction or materials to be used in the erection, alteration, or repair of a building or structure.

Chemical fume hood. A ventilated enclosure designed to contain and exhaust fumes, gases, vapors, mists, and particulate matter generated within the hood.

Construction. The construction, reconstruction, alteration, repair, or conversion of buildings and structures.

Day-night average sound level (Ldn). A 24-hour energy average sound level expressed in dBA~~,~~ with a 10 decibel penalty applied to noise occurring between 10 p.m. and 7 a.m.

DHCD. The Virginia Department of Housing and Community Development.

Emergency communication equipment. Emergency communication equipment, includes two-way radio communications, signal booster, bi-directional amplifiers, radiating cable systems, ~~or~~ internal multiple antenna, or a combination of ~~the foregoing~~ these.

Emergency public safety personnel. Emergency public safety personnel and includes firefighters, emergency medical personnel, law-enforcement officers, and other emergency public safety personnel routinely called upon to provide emergency assistance to members of the public in a wide variety of emergency situations, including fires, medical emergencies, violent crimes, and terrorist attacks.

Emergency supplemental hardware. Any approved hardware used only for emergency events or drills to keep intruders from entering the room during an active shooter or hostile threat event or drill.

Equipment. Plumbing, heating, electrical, ventilating, air-conditioning and refrigeration equipment, elevators, dumbwaiters, escalators, and other mechanical additions or installations.

Farm building or structure. A building or structure not used for residential purposes, located on property where farming operations take place, and used primarily for any of the following uses ~~or combination thereof~~:

1. Storage, handling, production, display, sampling or sale of agricultural, horticultural, floricultural, or silvicultural products produced in the farm.
2. Sheltering, raising, handling, processing, or sale of agricultural animals or agricultural animal products.
3. Business or office uses relating to the farm operations.
4. Use of farm machinery or equipment or maintenance or storage of vehicles, machinery, or equipment on the farm.
5. Storage or use of supplies and materials used on the farm.
6. Implementation of best management practices associated with farm operations.

Hospice facility. An institution, place, or building owned or operated by a hospice provider and licensed by the Virginia Department of Health as a hospice facility to provide room, board, and palliative and supportive medical and other health services to terminally ill patients and their families, including respite and symptom management, on a 24-hour basis to individuals requiring such care pursuant to the orders of a physician.

Industrialized building. A combination of one or more sections or modules, subject to state regulations and including the necessary electrical, plumbing, heating, ventilating, and other service systems, manufactured off-site and transported to the point of use for installation or erection, with or without other specified components, to comprise a finished building. Manufactured homes shall not be considered industrialized buildings for the purpose of this code.

~~Laboratory suite. A fire-rated enclosed laboratory area that will provide one or more laboratory spaces, within a Group B educational occupancy, that are permitted to include ancillary uses such as offices, bathrooms, and corridors that are contiguous with the laboratory area and are constructed in accordance with Section 430.3.~~

LBBCA. Local board of building code appeals.

Liquid fertilizer. A fluid in which a fertilizer is in true solution. This term does not include anhydrous ammonia or a solution used in pollution control.

Local building department. ~~The~~ Any agency ~~or agencies~~ of any local governing body charged with the administration, supervision, or enforcement of this code, approval of construction documents, inspection of buildings or structures, or issuance of permits, licenses, certificates, or similar documents.

Local governing body. The governing body of any city, county, or town in this Commonwealth.

Locality. A city, county, or town in this Commonwealth.

Manufactured home. A structure subject to federal regulation~~, which~~ that is transportable in one or more sections; is eight body feet or more in width and 40 body feet or more in length in the traveling mode, or is 320 or more square feet when erected on site; is built on a permanent chassis; is designed to be used as a single-family dwelling, with or without a permanent foundation~~,~~ when connected to the required utilities; and includes the plumbing, heating, air-conditioning, and electrical systems contained in the structure.

Marina. Any installation, operating under public or private ownership, that has a structure providing dockage or moorage for boats, other than paddleboats or rowboats, and provides, through sale, rental, fee, or on a free basis, any equipment, supply, or service, including fuel, electricity, or water, for the convenience of the public or its lessees, renters, or users of its facilities. A dock or pier with or without slips that exclusively serves a single-family residential lot for the use of the owner of the lot is not a marina.

Night club. Any building in which the main use is a place of public assembly that provides exhibition, performance, or other forms of entertainment; serves alcoholic beverages; and provides music and space for dancing.

Permissible fireworks. Any sparklers, fountains, Pharaoh's serpents, caps for pistols, or pinwheels commonly known as whirligigs or spinning jennies.

Permit holder. The person to whom the permit is issued.

Public building. A structure or building that is owned, leased, or otherwise occupied by a municipality or the state and used for any municipal or public purposes by the municipality or the state.

Short-term holding area. An area containing a holding cell, or a holding room, including associated rooms or spaces where the occupants are restrained or detained by the use of security measures not under the occupant's control for less than 24 hours.

~~Permit Holder. The person to whom the permit is issued~~.

Skirting. A weather-resistant material used to enclose the space from the bottom of the manufactured home to grade.

Slip. A berth or space where a boat may be secured to a fixed or floating structure, including a dock, finger pier, boat lift, or mooring buoy.

Sound transmission class (STC) rating. A single number characterizing the sound reduction performance of a material tested in accordance with ASTM E90-90, "Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions."

State regulated care facility (SRCF). A building occupied by persons in the care of others where program oversight is provided by the Virginia Department of Social Services, the Virginia Department of Behavioral Health and Developmental Services, the Virginia Department of Education, the Virginia Department of Health, or the Virginia Department of Juvenile Justice.

State Review Board. The Virginia State Building Code Technical Review Board as established under § 36-108 of the Code of Virginia.

Teaching and research laboratory. A building or portion of a building where hazardous materials are stored, used, and handled for the purpose of testing, analysis, teaching, research, or developmental activities on a nonproduction basis rather than in a manufacturing process.

Technical assistant. Any person employed by or under an extended contract to a local building department or local enforcing agency for enforcing the USBC, including inspectors, plans reviewers, and permit technicians. For the purpose of this definition, an extended contract shall be a contract with an aggregate term of 18 months or longer.

Tenable environmental. An environment in which the products of combustion, including smoke, toxic gases, particulates, and heat~~,~~ are limited or otherwise restricted in order to maintain the impact on occupants, including those in the area of fire origin, to a level that is not life threatening and permits the rescue of occupants for a limited time.

~~Unsafe building or structure. Any building or structure that is under construction and has not received a permanent certificate of occupancy, final inspection, or for which a permit was never issued or has expired and has been determined by the building official to be of faulty~~

~~construction that is so damaged, decayed, dilapidated, structurally unsafe, or of such faulty construction or unstable foundation that partial or complete collapse is likely, or any unfinished construction that does not have a valid permit, or the permit has been revoked, and the condition of the unfinished construction presents an immediate serious and imminent threat to the life and safety of the occupants or the public.~~

VADR. The Virginia Amusement Device Regulations (13VAC5-31).

VCS. The Virginia Certification Standards (13VAC5-21).

Working day. A day other than Saturday, Sunday, or a legal local, state or national holiday.

B. Change the following definitions in Section 202 of the IBC to read:

~~Addition. An extension or increase in floor area, number of stories, or height of a building or structure.~~

Ambulatory care facility. Buildings or portions thereof used to provide medical care on less than a 24-hour basis that are licensed by the Virginia Department of Health as outpatient surgical hospitals.

Automatic fire-extinguishing system. An approved system of devices and equipment that automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire and includes among other systems an automatic sprinkler system, unless otherwise expressly stated.

Base flood elevation. The elevation of the base flood, including wave height, relative to the National Geodetic Vertical Datum (NGVD), North American Vertical Datum (NAVD) or other datum specified on the Flood Insurance Rate Map (FIRM), and as shown in the Flood Insurance Study.

Building. A combination of materials, whether portable or fixed, having a roof to form a structure for the use or occupancy by persons, or property. The word "building" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Building" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Virginia Commonwealth Transportation Board.

Change of occupancy. See Section 202 of the VEBC.

Clinic, outpatient. Buildings or portions thereof used to provide medical care on less than a 24-hour basis that are not licensed by the Virginia Department of Health as outpatient surgical hospitals.

Custodial care. Assistance with day-to-day living tasks, such as assistance with cooking, taking medication, bathing, using toilet facilities, and other tasks of daily living. In other than in hospice facilities, custodial care includes care for occupants ~~that~~ who have the ability to respond to emergency situations and evacuate at a slower rate ~~or,~~ who have mental and psychiatric complications, or both.

Coastal high-hazard area. Area within the special flood hazard area extending from offshore to the inland limit of a coastal primary sand dune, as defined in § 28.2-1400 of the Code of Virginia, along an open coast and any other area that is subject to high-velocity wave action from storms or seismic sources and shown either in the Flood Insurance Study or on the Flood Insurance Rate Map (FIRM) or other flood hazard map as velocity Zone V, VO, VE, or V1-30 (areas subject to wave heights of three feet (914.4 mm) or more).

Essential facilities. Buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, tornadoes, snow, or earthquakes.

Existing structure. A structure (i) for which a legal building permit has been issued under any edition of the USBC, (ii) that has been previously approved, or (iii) that was built prior to the initial edition of the USBC. For application of provisions in flood hazard areas, an existing structure is any building or structure for which the start of construction commenced before the effective date of the community's first flood plain management code, ordinance, or standard.

Flood or flooding.

1. A general and temporary condition of partial or complete inundation of normally dry land from either of the following:

1.1 The overflow of inland or tidal waters.

1.2 The unusual and rapid accumulation or runoff of surface waters from any source.

2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event that results in flooding as defined in subdivision 1.1 of this definition.

3. Mudflows that are proximately caused by flooding as defined in subdivision 1.2 of this definition and are akin to a river of liquid and flowing mud on the surface of normally dry land areas, as when earth is carried by a current of water and disposed along the path of the current.

Flood hazard area. The greater of the following two areas:

1. The area within a flood plain subject to a 1.0% or greater chance of flooding in any year (also known as the 100-year floodplain).

2. The area designated as a flood hazard area on a community's flood hazard map or otherwise legally designated, including areas in either the Flood Insurance Study or on the Flood Insurance Rate Map (FIRM) and including areas added to account for future flooding conditions based on the locally adopted sea level rise projected to occur by 2070.

Laboratory suite. A fire-rated enclosed laboratory area that will provide one or more laboratory spaces, within a Group B educational occupancy, that are permitted to include ancillary uses such as offices, bathrooms, and corridors that are contiguous with the laboratory area and are constructed in accordance with Section 430.3.

Nominal loads. The magnitudes of the loads specified in Chapter 16 (dead, live, soil, wind, tornado, snow, rain, flood, and earthquake).

Owner. The owner ~~or owners~~ of the freehold of the premises or lesser estate therein, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee, or lessee in control of a building or structure.

Registered design professional (RDP). An architect or professional engineer, licensed to practice architecture or engineering, as defined under § 54.1-400 of the Code of Virginia.

~~Swimming pool. A pool or spa as defined in the International Swimming Pool and Spa Code (ISPSC).~~

Risk category. A categorization of buildings and other structures for determination of flood, wind, tornado, snow, ice, and earthquake loads based on the risk associated with unacceptable performance.

Special flood hazard area. The land area subject to flood hazards and shown on a Flood Insurance Rate Map or the Flood Insurance Study as Zone A, AE, A1-30, A99, AR, AO, AH, V, VO, VE, or V1-30.

Structure. An assembly of materials forming a construction for occupancy or use, including stadiums, gospel and circus tents, reviewing stands, platforms, stagings, observation towers, radio towers, water tanks, storage tanks (underground and aboveground), trestles, piers, wharves, swimming pools, amusement devices, storage bins, and other structures of this general nature but excluding water wells. The word "structure" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Structure" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Virginia Commonwealth Transportation Board.

Swimming pool. A pool or spa as defined in the International Swimming Pool and Spa Code (ISPSC).

Wall. A vertical element with a horizontal length-to-thickness ratio greater than three used to enclose space.

C. Delete the following definitions from Section 202 of the IBC:

Agricultural building

Historic buildings

13VAC5-63-210. Chapter 3 Use and occupancy classification.

A. Change ~~Sections~~ Items 6 and 8 of Section 302.1 ~~to read~~ of the IBC to read:

~~302.1 General. Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed in this section. A room or space that is intended to be occupied at different times for different purposes shall comply with all of the requirements that are applicable to each of the purposes for which the room or space will be occupied. Structures with multiple occupancies or uses shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.~~

~~1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4, and A-5.~~

~~2. Business (see Section 304): Group B.~~

~~3. Educational (see Section 305): Group E.~~

~~4. Factory and Industrial (see Section 306): Groups F-1 and F-2.~~

~~5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4, and H-5.~~

~~6.~~ 1. Institutional (see Section 308 and Section 313 for SRCFs).

~~7. Mercantile (see Section 309): Group M.~~

~~8.~~ 2. Residential (see Section 310 and Section 313 for SRCFs): Groups R-1, R-2, R-3, R-4, and R-5.

~~9. Storage (see Section 311): Groups S-1 and S-2.~~

~~10. Utility and Miscellaneous (see Section 312): Group U.~~

B. Change Sections 303.1.1 and 303.1.2 of the IBC to read:

303.1.1 Small buildings and tenant spaces. A building or tenant space used for assembly purposes with an occupant load of less than 50 persons shall be permitted to be classified as a Group B occupancy.

303.1.2 Small assembly spaces. The following rooms and spaces shall be permitted to be classified as Group B occupancies or as part of the assembly occupancy:

1. A room or space used for assembly purposes with an occupant load of less than 50 persons and ancillary to another occupancy.

2. A room or space used for assembly purposes that is less than 750 square feet (70 m^2) in area and ancillary to another occupancy.

C. Change Section 303.6 of the IBC to read:

303.6 Assembly Group A-5. Assembly uses intended for participation in or viewing outdoor activities, including:

Amusement park structures

Bleachers

Grandstands

Stadiums

Swimming pools

D. Add Section 304.1.1 to the IBC to read:

304.1.1 Day support and day treatment facilities. Day support and day treatment facilities licensed by the Virginia Department of Behavioral Health and Developmental Services shall be permitted to be classified as Group B occupancies provided all of the following conditions are met:

1. Participants who may require physical assistance from staff to respond to an emergency situation shall be located on the level of exit discharge.

2. Any change in elevation within the exit access on the level of exit discharge shall be made by means of a ramp or sloped walkway.

3. Where the facilities are located more than two stories above grade, an automatic sprinkler system shall be provided throughout the building in accordance with Section 903.3.1.1.

E. ~~Change Exception 14 of Section 307.1.1 of the IBC and add Exception 18 to~~ Delete Exception 19 of Section 307.1.1 of the IBC and change Exceptions 14 and 18 to Section 307.1.1 of the IBC to read:

14. The storage of black powder, smokeless propellant and small arms primers in Groups M, R-3 and R-5 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the IFC, as amended in Section 307.9.

18. The storage of distilled spirits and wines in wooden barrels and casks. Distillation, blending, bottling, and other hazardous materials storage or processing shall be in separate control areas complying with Section 414.2.

F. Change the "Flammable liquid, combination (IA, IB, IC)" row in Table 307.1(1), add a new "Permissible fireworks" row to Table 307.1(1) of the IBC, and add footnote "r" to Table 307.1(1) of the IBC to read:

Flammable liquid, combination (IA, IB, IC)	NA	H-2 or H-3	NA	120[d,e,h]	NA	NA	120[d,h]	NA	NA	30[d,h,r]
Permissible fireworks	1.4G	H-3	125[d,e,l]	NA	NA	NA	NA	NA	NA	NA
r. The tabular value for distilled spirit distillation and blending rooms is 120 gallons.										

G. Add Section 307.9 to the IBC to read:

307.9 Amendments. The following changes shall be made to the IFC for the use of Exception 14 in Section 307.1.1:

1. Change the following definition in Section 202 of the IFC to read:

Smokeless propellants. Solid propellants, commonly referred to as smokeless powders, or any propellants classified by DOTn as smokeless propellants in accordance with NA3178 (Smokeless Powder for Small Arms), used in small arms ammunition, firearms, cannons, rockets, propellant-actuated devices, and similar articles.

2. Change Section 314.1 of the IFC to read as follows:

314.1 General. Indoor displays constructed within any building or structure shall comply with Sections 314.2 through 314.5.

3. Add new Section 314.5 to the IFC to read as follows:

314.5 Smokeless powder and small arms primers. Vendors shall not store, display, or sell smokeless powder or small arms primers during trade shows inside exhibition halls except as follows:

1. The amount of smokeless powder each vendor may store is limited to the storage arrangements and storage amounts established in Section 5606.5.2.1.

2. Smokeless powder shall remain in the manufacturer's original sealed container and the container shall remain sealed while inside the building. The repackaging of smokeless powder shall not be performed inside the building. Damaged containers shall not be repackaged inside the building and shall be immediately removed from the building in such manner to avoid spilling any powder.

3. There shall be at least 50 feet separation between vendors and 20 feet from any exit.

4. Small arms primers shall be displayed and stored in the manufacturer's original packaging and in accordance with the requirements of Section 5606.5.2.3.

4. Change Exception 4 and add Exceptions 10 and 11 to Section 5601.1 of the IFC as follows:

4. The possession, storage and use of not more than 15 pounds (6.75 kg) of commercially manufactured sporting black powder, 20 pounds (9 kg) of smokeless powder, and any amount of small arms primers for hand loading of small arms ammunition for personal consumption.

10. The display of small arms primers in Group M when in the original manufacturer's packaging.

11. The possession, storage, and use of not more than 50 pounds (23 kg) of commercially manufactured sporting black powder, 100 pounds (45 kg) of smokeless powder, and small arms primers for hand loading of small arms ammunition for personal consumption in Group R-3 or R-5, or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures at least 10 feet (3048 mm) from inhabited buildings and are accessory to Group R-3 or R-5.

5. Change Section 5606.4 of the IFC to read as follows:

5606.4 Storage in residences. Propellants for personal use in quantities not exceeding 50 pounds (23 kg) of black powder or 100 pounds (45 kg) of smokeless powder shall be stored in original containers in occupancies limited to Groups R-3 and R-5 or 200 pounds (91 kg) of smokeless powder when stored in the manufacturer's original containers in detached Group U structures at least 10 feet (3048 mm) from inhabited buildings and are accessory to Group R-3 or R-5. In other than Group R-3 or R-5, smokeless powder in quantities exceeding 20 pounds (9 kg) but not exceeding 50 pounds (23 kg) shall be kept in a wooden box or cabinet having walls of at least one inch (25 mm) nominal thickness or equivalent.

6. Delete Sections 5606.4.1 and 5606.4.2 of the IFC.

7. Change Section 5606.5.1.1 of the IFC to read as follows:

5606.5.1.1 Smokeless propellant. No more than 100 pounds (45 kg) of smokeless propellants in containers of eight pounds (3.6 kg) or less capacity shall be displayed in Group M occupancies.

8. Delete Section 5606.5.1.3 of the IFC.

9. Change Section 5606.5.2.1 of the IFC as follows:

5606.5.2.1 Smokeless propellant. Commercial stocks of smokeless propellants shall be stored as follows:

1. Quantities exceeding 20 pounds (9 kg), but not exceeding 100 pounds (45 kg), shall be stored in portable wooden boxes having walls of at least one inch (25 mm) nominal thickness or equivalent.

2. Quantities exceeding 100 pounds (45 kg), but not exceeding 800 pounds (363 kg), shall be stored in storage cabinets having walls at least one inch (25 mm) nominal thickness or equivalent. Not more than 400 pounds (182 kg) shall be stored in any one cabinet, and cabinets shall be separated by a distance of at least 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of at least one hour.

3. Storage of quantities exceeding 800 pounds (363 kg), but not exceeding 5,000 pounds (2270 kg), in a building shall comply with all of the following:

3.1. The warehouse or storage room is not open to unauthorized personnel.

3.2. Smokeless propellant shall be stored in nonportable storage cabinets having wood walls at least one inch (25 mm) nominal thickness or equivalent and having shelves with no more than ~~3~~ three feet (914 mm) of vertical separation between shelves.

3.3. No more than 400 pounds (182 kg) is stored in any one cabinet.

3.4. Cabinets shall be located against walls with at least 40 feet (12,192 mm) between cabinets. The minimum required separation between cabinets may be reduced to 20 feet (6096 mm) provided that barricades twice the height of the cabinets are attached to the wall, midway between each cabinet. The barricades must extend a minimum of 10 feet (3048 mm) outward, be firmly attached to the wall, and be constructed of steel not less than 0.25 inch thick (6.4 mm), ~~2 inch~~ two-inch (51 mm) nominal thickness wood, brick, or concrete block.

3.5. Smokeless propellant shall be separated from materials classified as combustible liquids, flammable liquids, flammable solids, or oxidizing materials by a distance of 25 feet (7620 mm) or by a fire partition having a fire-resistance rating of ~~1~~ one hour.

3.6. The building shall be equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1.

4. Smokeless propellants not stored according to Item 1, 2, or 3 ~~above~~ shall be stored in a Type 2 or 4 magazine in accordance with Section 5604 and NFPA 495.

H. Change Section 308.2 of the IBC to read:

308.2 Institutional Group I-1. This occupancy shall include buildings, structures, or portions thereof for more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care. Buildings of Group I-1, shall be classified as the occupancy condition indicated in Section 308.2.1 or 308.2.2. Assisted living facilities licensed by the Virginia Department of Social Services shall be classified as one of the occupancy conditions indicated in Section 308.2.1 or 308.2.2. ~~T~~

I. Change Sections 308.2.1 and 308.2.2 of the IBC to read:

308.2.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation. Not more than five of the residents may require physical assistance from staff to respond to an emergency situation when all residents who may require the physical assistance reside on a level of exit discharge and the path of egress to the exit does not include steps.

308.2.2 Condition 2. This occupancy condition shall include buildings in which there are persons receiving custodial care who require assistance by not more than one staff member while responding to an emergency situation to complete building evacuation. Five of the residents may require physical assistance from more than one staff member to respond to an emergency.

J. Change Section 308.3 of the IBC to read:

308.3 Institutional Group I-2. This occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation.

K. Add an exception to Section 308.5 of the IBC to read:

Exception: Family day homes under Section 313.3.

L. Change Section 310.2 of the IBC to read:

310.2 Residential Group R-1. Residential occupancies containing sleeping units or more than two dwelling units, and:

1. The occupants are primarily transient, and
2. There are more than 10 occupants.

M. Change Section 310.3 of the IBC to read:

Residential Group R-2. Residential occupancies containing sleeping units or more than two dwelling units where the occupants are not primarily transient.

N. Change Sections 310.4, 310.4.1, 310.4.2, 310.5, and 310.5.1 and add Section 310.5.3 of the IBC to read:

310.4 Residential Group R-3. Residential occupancies containing no more than two dwelling units and where the occupancy is not classified as Group R-1, R-2, R-4, R-5, or I, and:

1. The occupants are not primarily transient, or
2. There are no more than 10 transient occupants per dwelling unit.

310.4.1 Radon-resistant construction. Group R-3 buildings and structures shall be subject to the radon-resistant construction requirements in Appendix F of the IRC in localities enforcing such requirements pursuant to Section ~~R327~~ R331 of the IRC.

310.4.2 Lodging houses. Owner-occupied or proprietor-occupied lodging houses and other transient boarding facilities not more than three stories above grade plane in height, with five or fewer guest rooms and 10 or fewer total occupants shall be permitted to be classified as either Group R-3 or R-5, provided that smoke alarms are installed in compliance with Section 907.2.11.2 for Group R-3 or Section R314 of the IRC for Group R-5.

310.5 Residential Group R-4. Residential occupancies with more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care. Buildings of Group R-4, other than assisted living facilities licensed by the Virginia Department of Social Services, shall be classified as the occupancy condition indicated in Section 310.5. Assisted living facilities licensed by the Virginia Department of Social Services shall be classified as one of the occupancy conditions indicated in Section 310.5.1 or 310.5.2.

310.5.1 Condition 1. This occupancy condition shall include buildings in which all persons receiving custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation or, in which not more than five of the residents may require physical assistance from staff to respond to an emergency situation when all residents who may require the physical assistance from staff reside on a level of exit discharge and the path of egress to the exit does not include steps.

310.5.3 Radon-resistant construction. Group R-4 buildings and structures shall be subject to the radon-resistant construction requirements in Appendix F of the VRC in localities enforcing such requirements pursuant to Section ~~R327~~ R331 of the VRC.

O. Add Section 310.6 to the IBC to read:

310.6 Residential Group R-5. Residential Group R-5 occupancies shall include residential occupancies within the scope of ~~the VRC, other occupancies specifically permitted in this code to be classified as Group R-5,~~ Section 310.6.1 and manufactured homes in accordance with the Virginia Manufactured Home Safety Regulations ~~(23VAC5-91)~~ (13VAC5-91).

~~The provisions of the International Residential Code for One- and Two-family Dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of the following when classified as Group R-5:~~

310.6.1 Virginia Residential Code. The provisions of the IRC for detached one-family and two-family dwellings and townhouses as amended by VCC Section 310.8, also referred to as the Virginia Residential Code (VRC) printed by the ICC, shall apply to construction, rehabilitation, and demolition of the types of buildings and structures listed in

this subsection, and the equipment therein, provided the building or structure is not more than three stories above grade plane in height with a separate means of egress:

1. Detached single-family and two-family dwellings.

2. Townhouses.

3. Care facilities for five or fewer people.

4. Owner-occupied or proprietor-occupied lodging houses with no more than five guest rooms and 10 or fewer total occupants.

5. Accessory structures of Group R-5 occupancies.

6. Other occupancies specifically permitted in this code to be classified as Group R-5.

~~The amendments to the IRC set out in Section 310.9 shall be made to the IRC for its use as part of this code. In addition, all~~ All references to the IRC ~~and~~ in the IBC shall be considered to be references to this section.

P. Add Section ~~310.6.1~~ 310.6.1.1 to the IBC to read:

~~310.6.1~~ 310.6.1.1 Additional requirements. Methods of construction, materials, systems, equipment, or components for Group R-5 structures not addressed by prescriptive or performance provisions of the ~~IRC~~ VRC shall comply with applicable ~~IBC~~ VCC requirements.

Q. Add Section 310.7 to the IBC to read:

310.7 Radon-resistant construction in Groups R-3 and R-4 structures. Groups R-3 and R-4 structures shall be subject to the radon-resistant construction requirements in Appendix F of the IRC in localities enforcing such requirements pursuant to Section ~~R324~~ R331 of the IRC.

R. Add Section 310.8 to the IBC to read:

310.8 Amendments to the IRC. The following changes shall be made to the IRC for its use as part of this code:

1. Add the following definitions to read:

Accessory dwelling unit. A dwelling unit in a two-family dwelling that is accessory to the primary dwelling unit. An accessory dwelling unit provides for separate living, sleeping, eating, cooking, and sanitation facilities for one or more occupants but may share living space, means of egress, utilities, or other components. An accessory dwelling unit fully complies with the requirements of this code for a dwelling unit except where specified otherwise.

Living area. Space within a dwelling unit utilized for living and entertainment, including family rooms, great rooms, living rooms, dens, media rooms, and similar spaces.

Nonpotable fixtures and outlets. Fixtures and outlets that are not dependent on potable water for the safe operation to perform their intended use. Such fixtures and outlets may include water closets, urinals, irrigation, mechanical equipment, and hose connections to perform operations, such as vehicle washing and lawn maintenance.

Nonpotable water systems. Water systems for the collection, treatment, storage, distribution, and use or reuse of nonpotable water. Nonpotable systems include reclaimed water, rainwater, and gray water systems.

Rainwater. Natural precipitation, including snow melt, from roof surfaces only.

Stormwater. Precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage.

Substantial damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

Substantial Improvement. Any repair, reconstruction, rehabilitation, alteration, addition, or other improvement of a building or structure, the cost of which equals or exceeds 50% of the market value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary, or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.

2. Any alteration of a historic structure, provided that the alteration will not preclude the building or structure's continued designation as a historic structure.

Two-family dwelling. A dwelling that includes two dwelling units or one dwelling unit and one accessory dwelling unit.

2. Change the following definitions to read:

~~Attic, habitable. A finished or unfinished area, not considered a story, complying with all of the following requirements:~~

~~1. The occupiable floor area is at least 70 square feet (17 m^2), in accordance with Section R304,~~

~~2. The occupiable floor area has a ceiling height in accordance with Section R305, and~~

~~3. The occupiable space is enclosed by the roof assembly above, knee walls (if applicable) on the sides and the floor-ceiling assembly below.~~

~~Habitable attics greater than two-thirds of the area of the story below or over 400 square feet (37.16 m^2) shall not be permitted in dwellings or townhouses that are three stories above grade plane in height.~~

Dwelling. Any building that contains one or two dwelling units~~,~~ or one dwelling ~~unity~~ unit and one accessory dwelling unit~~,~~ used, intended, or designed to be built, used, rented, leased, let, or hired out to be occupied~~,~~ or that are occupied for living purposes.

Flood hazard area. The greater of the following two areas:

1. The area within a floodplain subject to a 1.0% or greater chance of flooding in any given year (also known as the 100-year floodplain).

2. The area designated as a flood hazard area on a community's flood hazard map or otherwise legally designated, including areas shown in either the Flood Insurance Study or on the Flood Insurance Rate Map (FIRM) and including areas added to account for future flooding conditions based on the locally adopted sea level rise projected to occur by 2070.

Gray water. Water discharged from lavatories, bathtubs, showers, clothes washers, and laundry trays.

Manufactured home. A structure subject to federal regulation that is transportable in one or more sections; is eight body feet or more in width and 40 body feet or more in length in the traveling mode or is 320 or more square feet when erected on site; is built on a permanent chassis; is designed to be used as a single-family dwelling, with or without a permanent foundation when connected to the required utilities; and includes the plumbing, heating, air conditioning, and electrical systems contained in the structure.

~~3. Change table R301.2(2) to read:~~

EDITOR'S NOTE: Table R301.2(2), Component and Cladding Loads for a Building with a Mean Roof Height of 30 Feet Located in Exposure B (ASD) (psf)[a,b,c,d,e,f,g], is deleted in its entirety; therefore, the text of Table R301.2(2) is not set out.

~~4. Change table R301.2(3) to read:~~

~~Table R301.2(3)~~

~~HEIGHT AND EXPOSURE ADJUSTMENT COEFFICIENTS FOR TABLE R301.2(2)~~

~~MEAN ROOF HEIGHT~~	~~EXPOSURE~~		
	~~B~~	~~C~~	~~D~~
~~15~~	~~0.82~~	~~1.21~~	~~1.47~~
~~20~~	~~0.89~~	~~1.29~~	~~1.55~~
~~25~~	~~0.94~~	~~1.35~~	~~1.61~~
~~30~~	~~1.00~~	~~1.40~~	~~1.66~~
~~35~~	~~1.05~~	~~1.45~~	~~1.70~~
~~40~~	~~1.09~~	~~1.49~~	~~1.74~~
~~45~~	~~1.12~~	~~1.53~~	~~1.78~~
~~50~~	~~1.16~~	~~1.56~~	~~1.81~~
~~55~~	~~1.19~~	~~1.59~~	~~1.84~~
~~60~~	~~1.22~~	~~1.62~~	~~1.87~~

~~5. Change~~ 3. Add the following paragraph to the end of Section R301.2.1 to read:

~~R301.2.1 Wind design criteria. Buildings and portions thereof shall be constructed in accordance with the wind provisions of this code using the ultimate design wind speed in Table R301.2(1) as determined from Figure R301.2(5)A. The structural provisions of this code for wind loads are not permitted where wind design is required as specified in Section R301.2.1.1. Where different construction methods and structural materials are used for various portions of a building, the applicable requirements of this section for each portion shall apply. Where not otherwise specified, the wind loads listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(3) shall be used to determine design load performance requirements for wall coverings, curtain walls, roof coverings, exterior windows, skylights, garage doors, and exterior doors. Asphalt shingles shall be designed for wind speeds in accordance with Section R905.2.4. A continuous load path shall be provided to transmit the applicable uplift forces in Section R802.11.1 from the roof assembly to the foundation. Where ultimate design wind speeds in Figure R301.2(4)A are less than the lowest wind speed indicated in the prescriptive provisions of this code, the lowest wind speed indicated in the prescriptive provisions of this code shall be used.~~ Wind speeds for localities in special wind regions, near mountainous terrain, and near gorges shall be based on elevation. Areas at 4,000 feet in elevation or higher shall use the ~~nominal~~ ultimate design wind speed of 140 mph (62.6 m/s) and areas ~~under~~ lower than 4,000 feet in elevation shall use ~~nominal~~ the ultimate design wind speed of 110 mph (49.2 m/s). Gorge areas shall be based on the highest recorded speed per locality or in accordance with local jurisdiction requirements determined in accordance with Section 26.5.2 of ASCE 7.

~~6. Change section R 301.2.1.1 to read:~~

~~R301.2.1.1 Wind limitations and wind design required. The wind provisions of this code shall not apply to the design of buildings where wind design is required in accordance with Figure R301.2(5)B or where the ultimate design wind speed, V_{alt} in Figure R301.2(5)A equals or exceeds 140 mph in a special wind region.~~

~~Exceptions:~~

~~1. For concrete construction, the wind provisions of this code shall apply in accordance with the limitations of Sections R404 and R608.~~

~~2. For structural insulated panels, the wind provisions of this code shall apply in accordance with the limitations of Section R610.~~

~~3. For cold-formed steel light-frame construction, the wind provisions of this code shall apply in accordance with the limitations of Sections R505, R603, and R804.~~

~~In regions where wind design is required in accordance with Figure R301.2(5)B or where the ultimate design wind speed V_{alt} in Figure R301.2(5)A equals or exceeds 140 mph in a special wind region, the design of buildings for wind loads shall be in accordance with one or more of the following methods:~~

~~1. AWC Wood Frame Construction Manual (WFCM).~~

~~2. ICC Standard for Residential Construction in High-Wind Regions (ICC 600).~~

~~3. ASCE Minimum Design Loads for Buildings and Other Structures (ASCE 7).~~

~~4. AISI Standard for Cold-Formed Steel Framing – Prescriptive Method for One- and Two-Family Dwellings (AISI S230).~~

~~5. International Building Code.~~

~~The elements of design not addressed by the methods in Items 1 through 5 shall be in accordance with the provisions of this code.~~

~~Where ASCE 7 or the International Building Code is used for the design of the building, the wind speed map and exposure category requirements as specified in ASCE 7 and the International Building Code shall be used.~~

~~7. Change Figure R301.2(5)A to read:~~

~~Note: Crosshatching on map indicates Special Wind Region~~

EDITOR'S NOTE: Figures R301.2(5)A, Ultimate Design Wind Speeds; R301.2(5)B, Regions Where Wind Design Is Required; and R301.2(8), Component and Cladding Pressure Zones, are deleted; therefore the figures are not set out.

~~8. Change Figure R301.2(5)B to read:~~

~~9. Change Figure R301.2(8) to read:~~

~~10.~~ 4. Add Exceptions 6 and 7 to Section R302.1 to read:

6. Decks and open porches.

7. Walls of dwellings and accessory structures located on lots in subdivisions or zoning districts where building setbacks established by local ordinance prohibit the walls of the structures on adjacent lots from being closer than 10 feet (3048 mm) to each other at any point along the exterior walls.

~~11.~~ 5. Change the Projections row of table R302.1(1) to remove the top row and change the Minimum Fire Separation Distance for Fire-resistance rated Exterior Wall Elements to less than five feet.

~~12. Change Section R302.2 to read:~~

~~R302.2 Townhouses. Wall separating townhouse units shall be constructed in accordance with Section R302.2.1 or R302.2.2 and shall comply with Sections 302.2.3 through 302.2.5.~~

~~13. Change Section R302.2.2 to read:~~

~~R302.2.2 Common walls. Common walls separating townhouses shall be assigned a fire resistance rating in accordance with Item 1 or 2. The common wall shared by two townhouses shall be constructed without plumbing or mechanical equipment, ducts or vents, other than water-filled fire sprinkler piping, in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be in accordance with Chapters 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section R302.4.~~

~~1. Where a fire sprinkler system in accordance with Section P2904 is provided, the common wall shall be not less than a one-hour fire-resistance rated wall assembly tested in accordance with ASTM E119, UL 263, or Section 703.3 of the International Building Code.~~

~~2. Where a fire sprinkler system in accordance with Section P2904 is not provided, the common wall shall be not less than a two-hour fire-resistance rated wall assembly in accordance with ASTM E119, UL 263, or Section 703.3 of the International Building Code.~~

~~14. Add exception~~ 6. Change Exception 6 to Section R302.2.6 to read:

6. ~~Townhouses~~ Townhouse units protected by a fire sprinkler system complying with Section P2904, NFPA 13, NFPA 13R, or NFPA 13D.

~~15. Add the following sentence to the end of Section R302.3~~ 7. Change Section R302.3, including Exception 1, and add Exception 3 to read (Exception 2 remains):

Dwelling units in two-family dwellings shall be separated from each other by wall and floor assemblies having not less than a one-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263, or Section 703.2.2 of the International Building Code. Fire-resistance-rated floor or ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing. Dwelling unit separation wall assemblies that are constructed on a lot line shall be constructed as required in Section R302.2 for townhouses.

~~16. Change the first exception in R302.3 to read:~~

1. A fire-resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13, NFPA 13R, or Section P2904.

~~17. Add a third exception in R302.3 to read:~~

3. Fire resistant rated assemblies are not required to separate a dwelling unit and accessory dwelling unit where both units are located on the same lot and comply with Sections R314.7 and R315.5.

~~18. Change the exceptions to R302.4.1 to read:~~

~~Exceptions:~~

~~1. Where the penetrating items are steel, ferrous, or copper pipes, tubes, or conduits, the annular space shall be protected as follows:~~

~~1.1 In Concrete or masonry wall or floor assemblies, concrete, grout, or mortar shall be permitted where installed to the full thickness of the wall or floor assembly or the thickness required to maintain the fire resistance rating, provided both of the following are complied with:~~

~~1.1.1 The nominal diameter of the penetrating item is not more than 6 inches (152 mm.~~

~~1.1.2 The area of the opening through the wall does not exceed 144 square inches (92,900 mm^2).~~

~~1.2 The material used to fill the annular space shall prevent the passage of flame and hot gasses sufficient to ignite cotton waste where subjected to ASTEM E119 or UL 263 time temperature fire conditions under a positive pressure differential of not less than 0.01 inch of water (3 Pa) at the location of the penetration for the time period equivalent to the fire resistance rating of the construction penetrated.~~

~~2. The annular space created by the penetration of water-filled fire sprinkler piping, provided the annular space is filled using a material complying with Exception 1.2.~~

~~19. Change exception 3 of Section R302.4.2 to read:~~

~~3. The annular space created by the penetration of a fire sprinkler or water filled fire sprinkler piping, provided that the annular space is covered by a metal escutcheon plate.~~

~~20.~~ 8. Change Section R302.5.1 to read:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1-3/8 inches (35 mm) ~~thickness~~ thick, solid or honeycomb-core steel doors not less than 1-3/8 inches (35 mm) thick, or 20-minute fire-rated doors.

~~21.~~ 9. Delete Section R302.13 in its entirety.

~~22. Change Section R303.4 to read:~~

~~R303.4 Mechanical ventilation. Dwelling units shall be provided with mechanical ventilation in accordance with Section M1505.~~

~~23.~~ 10. Add an exception to Section R303.10 to read:

Exception: Seasonal structures not used as a primary residence for more than 90 days per year, unless rented, leased or let on terms expressed or implied to furnish heat, shall not be required to comply with this section.

~~24.~~ 11. Add Section R303.10.1 to read:

R303.10.1 Nonowner occupied required heating. Every dwelling unit or portion thereof ~~which~~ that is to be rented, leased, or let on terms either expressed or implied to furnish heat to the occupants thereof shall be provided with facilities in accordance with Section R303.10 during the period from October 15 to May 1.

~~25.~~ 12. Add Section R303.11 to read:

R303.11 Insect screens. Every door, window, and other outside opening required for ventilation purposes shall be supplied with approved tightly fitted screens of not less than 16 mesh per inch (16 mesh per 25 mm), and every screen door used for insect control shall have a self-closing device.

~~26.~~ 13. Add Section R306.5 to read:

R306.5 Water supply sources and sewage disposal systems. The water and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public or private water supply and a public or private sewer system. As provided for in Section 103.5 of Part I of the Virginia Uniform Statewide Building Code (13VAC5-63), for functional design, water supply sources and sewage disposal systems are regulated and approved by the Virginia Department of Health and the Virginia Department of Environmental Quality.

Note: See also the Memorandums of Agreement in the "Related Laws Package," which is available from the Virginia Department of Housing and Community Development.

~~27.~~ 14. Change Section R308.4.5 to read:

R308.4.5 Glazing and wet surfaces. Glazing in walls, enclosures, or fences containing or facing hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers, and indoor or outdoor swimming pools shall be considered a hazardous location if located less than 60 inches (1524 mm) measured horizontally, in a straight line, from the water's edge and the bottom exposed edge of the glazing is less than 60 inches (1524 mm) measured vertically above any standing or walking surface. This shall apply to single glazing and each pane in multiple glazing.

~~28. Change section R309.3 to read:~~

~~R309.3 Flood hazard areas. Garages and carports located in flood hazard areas as established by Table R301.2(1) shall be constructed in accordance with Section R322.~~

~~29.~~ 15. Change Section R310.1, including Exception 2 to read (Exceptions 1 and 3 remain):

R310.1 Emergency escape and rescue opening required. Basements, habitable attics, and every sleeping room

designated on the construction documents shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency egress and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court having a minimum width of 36 inches (914 mm) that opens to a public way.

~~Exceptions:~~

~~1.~~ 2. Dwelling units equipped throughout with an approved automatic sprinkler system installed in accordance with NFPA 13, NFPA 13R, or NFPA 13D or Section P2904.

~~2. Storm shelters and basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m^2).~~

~~30. Change~~ 16. Delete Section R310.2.2 and change Section R310.2.1 to read:

R310.2.1 Minimum opening area. Emergency and escape rescue openings shall have a net clear opening of not less than 5.7 square feet (0.530 m^2). The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside, including the tilting or removal of the sash as the normal operation. The net clear height opening shall be not less than 24 inches (610 mm), and the net clear width shall be not less than 20 inches (508 mm).

Exception: Grade floor or below grade openings shall have a net clear opening of not less than ~~5~~ five square feet (0.465 m^2).

~~31.~~ 17. Change Section R311.1 to read:

R311.1 Means of egress. Dwellings~~,~~ and each dwelling unit in a two-family dwelling~~,~~ shall be provided with a means of egress in accordance with this section. The means of egress shall provide a continuous and unobstructed path of vertical and horizontal egress travel from all portions of the dwelling to the required egress door without requiring travel through a garage. The required egress door shall open directly into a public way or to a yard or court that opens to a public way.

~~32.~~ 18. Change the exception to Section R311.3.1 to read:

Exception: The landing or floor on the exterior side shall ~~not~~ be not more than 8-1/4 inches (210 mm) below the top of the threshold provided the door does not swing over the landing or floor.

~~33.~~ 19. Change Section R311.3.2 to read:

R311.3.2 Floor elevations for other exterior doors. Doors other than the required egress door shall be provided with landings or floors not more than 8-1/4 inches (210 mm) below the top of the threshold.

Exception: A top landing is not required where a stairway of not more than two risers is located on the exterior side of the door, provided that the door does not swing over the stairway.

~~34.~~ 20. Change Section R311.7.5.1 to read:

R311.7.5.1 Risers. The riser height shall be not more than 8-1/4 inches (210 mm). The riser shall be measured vertically between the leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted, provided that the openings located more than 30 inches (~~763~~ 762 mm), as measured vertically, to the floor or grade below do not permit the passage of a ~~4 inch-diameter~~ four-inch-diameter (102 mm) sphere.

Exceptions:

1. The opening between adjacent treads is not limited on spiral stairways.

2. The riser height of spiral stairways shall be in accordance with Section R311.7.10.1.

~~35.~~ 21. Change Section R311.7.5.2 to read:

R311.7.5.2 Treads. The tread depth shall be not less than ~~9~~ nine inches (229 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

~~36. Change Section R311.7.7 to read:~~

~~R311.7.7 Stairway walking surface. The walking surface of treads and landings of stairways shall be level or sloped no steeper than one unit vertical in 48 units horizontal (2.0% slope).~~

~~37.~~ 22. Change Section R312.2.1 to read (exceptions remain):

R312.2.1 Window sills. In dwelling units, where the top of the sill of an operable window opening is located less than 18 inches (457 mm) above the finished floor and greater than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, the operable window shall comply with one of the following:

~~1. Operable windows with openings that will not allow a 4 inch diameter (102 mm) sphere to pass through the opening where the opening is in its largest opened position.~~

~~2. Operable windows that are provided with window fall prevention devices that comply with ASTM F 2090.~~

~~3. Operable windows that are provided with window opening control devices that comply with Section R312.2.2.~~

~~38.~~ 23. Replace Section R313 with the following:

Section R313. Automatic Fire Sprinkler Systems.

R313.1 Townhouse automatic fire sprinkler systems. Notwithstanding the requirements of Section 103.3, where installed, an automatic residential fire sprinkler system for townhouses shall be designed and installed in accordance with NFPA 13D or Section P2904.

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

~~39. Change Section R13.1.1 to read:~~

R313.1.1 Design and installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with Section P2904 or NFPA 13D, NFPA 13, or NFPA 13R.

R313.2 One-family and two-family dwellings automatic fire sprinkler systems. Notwithstanding the requirements of Section 103.3, where installed, an automatic residential fire sprinkler system shall be designed and installed in accordance with Section P2904, or NFPA 13D, NFPA 13, or NFPA 13R~~, or Section P2904~~.

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential fire sprinkler system.

~~40. Change section R313.2.1 to read:~~

R313.2.1 Design and installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D, 13, or 13R.

~~41.~~ 24. Delete Section R314.2.2.

~~42. Change~~ 25. Delete Exception 2 and change Exception 1 to Section R314.6 to read:

~~R314.6 Power source. Smoke alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source and, where primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.~~

Exception:

Smoke alarms shall be permitted to be battery operated with a minimum 10-year battery where installed in buildings without commercial power.

~~43.~~ 26. Change Section R314.7 to read:

R314.7 Fire alarm systems. A fire alarm system complying with Sections R314.7.1 through R314.7.4 shall be installed within a two-family dwelling that is constructed without fire separations in accordance with Exception 3 of Section R302.3 and shall be installed in such a manner that the actuation of an alarm will activate all notification appliances within both dwelling units. Fire alarm systems shall be permitted to be used in other dwelling units in lieu of smoke alarms and shall comply with Sections R314.7.1 through R314.7.4.

~~44.~~ 27. Change Section R314.7.3 to read: ~~1~~

R314.7.3 Permanent fixture. Where a household fire alarm system is installed, it shall become a permanent fixture of the dwelling unit.

~~45.~~ 28. Change Section R315.1.1 to read:

R315.1.1 Listings. Carbon monoxide alarms shall be hard wired, plug-in or battery type; listed as complying with UL 2034; and installed in accordance with this code and the manufacturer's installation instructions. Combination carbon monoxide and smoke alarms shall be listed in accordance with UL 2034 and UL 217.

~~46.~~ 29. Change Section R315.2 to read:

R315.2 Where required. Carbon monoxide alarms shall be provided in accordance with this section.

~~47.~~ 30. Delete Section R315.2.2.

~~48.~~ 31. Change Section R315.5 to read (exception remains):

R315.5 Interconnectivity. Where more than one carbon monoxide alarm is required to be installed within an individual dwelling unit in accordance with Section R315.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the dwelling. Alarm devices within a two-family dwelling constructed without fire separations in accordance with Exception 3 of Section R302.3 shall be interconnected in such a manner that the actuation of one alarm within either unit will activate all alarms within both dwelling units. Physical interconnection of carbon monoxide alarms shall not be required where listed wireless alarms are installed and all alarms sound upon activation of one alarm.

~~Exception: Interconnection of carbon monoxide alarms in existing areas shall not be required where alterations or repairs do not result in removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space, or basement available that could provide access for interconnection without the removal of interior finishes.~~

~~49.~~ 32. Delete Section R315.6.

~~50.~~ 33. Change Section R315.7.3 to read:

R315.7.3 Permanent fixture. Where a household carbon monoxide detection system is installed, it shall become a permanent fixture of the occupancy.

~~51.~~ 34. Add Section ~~R320.2~~ R320.3 to read:

~~R320.2~~ R320.3 Universal design features for accessibility in dwellings. Dwellings constructed under the IRC not subject to Section R320.1 may comply with Section ~~1109.16~~ 1110.17 of the USBC and be approved by the

local building department as dwellings containing universal design features for accessibility.

35. Change Sections R322.1.5, R322.1.8, and R322.2 to read:

R322.1.5 Lowest floor. The lowest floor shall be the lowest floor of the lowest enclosed area, including basement and excluding any unfinished flood-resistant enclosure that is usable solely for vehicle parking, building access, or limited (200 square feet or less) storage, provided that such enclosure is not built so as to render the building or structure in violation of this section.

R322.1.8 Flood-resistant materials. Building materials and installation methods used for flooring and interior and exterior walls and wall coverings below the elevation required in Section R322.2 or R322.3 shall be flood damage-resistant materials that conform to the provisions of FEMA TB-2 and ASCE 24.

R322.2 Flood hazard areas (including A Zones). Areas that have been determined to be prone to flooding and that are not subject to high-velocity wave action shall be designated as flood hazard areas. Flood hazard areas that have been delineated as subject to wave heights greater than or equal to 1-1/2 feet (457 mm) or otherwise designated by the jurisdiction shall be designated as either Coastal A Zones or V, VE, or V1-30 Zones and are subject to the requirements of Section R322.3. Buildings and structures constructed in whole or in part in flood hazard areas shall be designed and constructed in accordance with Sections R322.2.1 through R322.2.4.

~~52.~~ 36. Change ~~section~~ Item 4.2 of Section R322.2.1 to read (exception and other items remain):

~~R.322.2.1~~ R322.2.1 Elevation requirements.

~~1. Buildings and structures in floor hazard areas, including flood hazard areas not designated as Coastal A Zones, shall have the lowest floors elevated to or above the base flood elevation plus 1 foot (305 mm), or the design flood elevation, whichever is higher.~~

~~2. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including basement) elevated to a height above the highest adjacent grade of not less than the depth number specified in feet (mm) on the FIRM plus 1 foot (305 mm), or not less than 3 feet (915 mm) if a depth number is not specified.~~

~~3. Basement floors that are below grade on all sides shall be elevated to or above base flood elevation plus 1 foot (305 mm), or the design flood elevation, whichever is higher.~~

~~4. Garage and carport floors shall comply with one of the following:~~

~~4.1 They shall be elevated to or above the elevations required in Item 1 or Item 2, as applicable~~

4.2 They shall be at or above grade on not less than one side. Where a garage or carport is enclosed by walls, the garage or carport shall be used solely for parking, building access, or storage, and the walls shall be constructed of flood resistant materials.

~~Exception: Enclosed areas below the elevation required by this section, including basements with floors that are not below grade on all sides, shall meet the requirements of Section R322.2.2.~~

~~53. Change section R322.3.2 to read:~~

~~R322.3.2 Elevation Requirements.~~

~~1. Buildings and structures erected within coastal high-hazard areas and Coastal A Zones, shall be elevated so that the bottom of the lowest horizontal structural members supporting the lowest floor, with the exception of piling, pile caps, columns, grade beams and bracing, is elevated to or above the base flood elevation plus 1 foot (305 mm) or the design flood elevation, whichever is higher.~~

~~2. Basement floors that are below grade on all sides are prohibited.~~

~~3. Garages used solely for parking, building access or storage and carports, shall comply with Item 1 or shall be at or above grade on not less than one side, and where enclosed with walls. Such walls shall comply with Item 6.~~

~~4. The use of fill or structural support is prohibited.~~

~~5. Minor grading, and the placement of minor quantities of fill, shall be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios, and walkways.~~

~~6. Walls and partitions enclosing areas below the elevation required in this section shall meet the requirements of Sections R322.3.5 and R322.3.6~~

~~54. Change R322.3.3 to read:~~

~~R322.3.3 Foundations. Buildings and structures erected in coastal high-hazard areas and Coastal A Zones shall be supported on pilings or columns and shall be adequately anchored to such pilings or columns.~~

~~1. The space below the elevated building shall be either free of obstruction or, if enclosed with walls, the walls shall meet the requirements of Section R322.3.5.~~

~~2. Pilings shall have adequate soil penetrations to resist the combined wave and wind loads (lateral and uplift). Pile embedment shall include consideration of decreased resistance capacity caused by scour of soil strata surrounding the piling.~~

~~3. Columns and their supporting foundations shall be designed to resist combined wave and wind loads, lateral and uplift, and shall include consideration of decreased resistance capacity caused by scour of soil strata surrounding the columns. Spread footing, mat, raft, or other foundations that support columns shall not be permitted where soil investigations that are required in accordance with Section~~

~~R401.4 indicate that soil material under the spread footing, mat, raft, or other foundation is subject to scour or erosion from wave velocity flow conditions. If permitted, spread footing, mat, raft, or other foundations that support columns shall be designed in accordance with ASCE 24.~~

~~4. Flood and wave loads shall be associated with the design flood. Wind loads shall be those required by this code.~~

~~5. Foundation designs and construction documents shall be prepared and sealed in accordance with Section R322.3.9.~~

~~Exception: In Coastal A zones, stem wall foundations supporting a floor system above and backfilled with soil or gravel to the underside of the floor system shall be permitted provided that the foundations are designed to account for wave action, debris impact, erosion and local scour. Where soils are susceptible to erosion and local scour, stem wall foundations shall have deep footings to account for the loss of soil.~~

~~55. Change R324.6.2.1 to read:~~

~~R324.6.2.1 Alternative setback at ridge. Where an automatic sprinkler system is installed within the dwelling in accordance with NFPA 13D, 13,13R, or Section P2904, setbacks at ridges shall comply with one of the following:~~

~~1. For photovoltaic arrays occupying not more than 66% of the plan view total roof area, not less than an 18-inch (457 mm) clear setback is required on both sides of a horizontal ridge.~~

~~2. For photovoltaic arrays occupying more than 66% of the plan view total roof area, not less than a 36-inch (914 mm) clear setback is required on both sides of a horizontal ridge.~~

~~56. Add Section R326.1.1 to read:~~

~~R326.1.1 Changes to the ISPSC. The following change shall be made to the ISPSC:~~

~~1. Change Section 305.2.9 to read:~~

~~305.2.9 Equipment clear zone. Equipment, including pool equipment such as pumps, filters, and heaters shall not be installed within 36 inches (914 mm) of the exterior of the barrier when located on the same property.~~

37. Change Section R322.3.1 to read:

R322.3.1 Location and site preparation.

1. New buildings and buildings that are determined to be substantially improved shall be located landward of the reach of mean high tide.

2. For any alteration of sand dunes and mangrove stands, the building official shall require submission of an engineering analysis and a satisfactory Comment Document from FEMA for a Conditional Letter of Map Revision (CLOMR) that demonstrates that the proposed alteration will not increase the potential for flood damage.

38. Change Sections R322.3.6 and R322.3.10 to read:

R322.3.6 Enclosed areas below required elevation. Enclosed areas lower than the design flood elevation required in Section R322.3.2 are prohibited in Coastal A Zones and Coastal High Hazard Areas.

R322.3.10 Tanks. Underground tanks are prohibited in Coastal A Zones or Coastal High Hazard Areas. Aboveground tanks shall be installed at or above the design flood elevation required in Section R322.3.2. Where elevated on platforms, the platforms shall be cantilevered from or knee braced to the building or shall be supported on foundations that conform to the requirements of Section R322.3.

39. Change Section R324.6.2 to read:

R324.6.2 Setback at ridge. Not less than an 18-inch (457 mm) clear setback is required on both sides of a horizontal ridge.

40. Change Exception 1 and delete Exceptions 1.1, 1.2, 3, and 4 to Section R326.3 to read (Exception 2 remains):

R326.3 Story above grade plane. A habitable attic shall be considered a story above grade plane.

Exceptions: A habitable attic shall not be considered to be a story above grade plane provided that the habitable attic meets all the following:

1. The aggregate area of the habitable attic is not greater than two-thirds of the floor area of the story below or a maximum of 400 square feet.

~~57.~~ 41. Add Section ~~R328~~ R331 Radon-Resistant Construction.

~~58.~~ 42. Add Section ~~R328.1~~ R331.1 to read:

~~R328.1~~ R331.1 Local enforcement of radon requirements. Following official action under Article 7 (§ 15.2-2280 et seq.) of Chapter 22 of Title 15.2 of the Code of Virginia by a locality in areas of high radon potential, as indicated by Zone 1 on the U.S. EPA Map of Radon Zones (IRC Figure AF101), such locality shall enforce the provisions contained in Appendix ~~F~~ AF.

Exception: Buildings or portions thereof with crawl space foundations ~~which~~ that are ventilated to the exterior shall not be required to provide radon-resistant construction.

~~59.~~ 43. Add Section ~~R329~~ R332 Patio Covers.

~~60.~~ 44. Add Section ~~R329.1~~ R332.1 to read:

~~R329.1~~ R332.1 Use of Appendix ~~H~~ AH for patio covers. Patio covers shall comply with the provisions in Appendix ~~H~~ AH.

~~61.~~ 45. Add Section ~~R330~~ R333 Sound Transmission.

~~62.~~ 46. Add Section ~~R330.1~~ R333.1 to read:

~~R330.1~~ R333.1 Sound transmission between dwelling units. Construction assemblies separating dwelling units

shall provide airborne sound insulation as required in Appendix ~~K~~ AK.

Exception: Accessory dwelling units.

~~63.~~ 47. Add Section ~~R330.2~~ R333.2 to read:

~~R330.2~~ R333.2 Airport noise attenuation. This section applies to the construction of the exterior envelope of detached one-family and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress within airport noise zones when enforced by a locality pursuant to § 15.2-2295 of the Code of Virginia. The exterior envelope of such structures shall comply with Section 1206.4 of the state amendments to the IBC.

~~64.~~ 48. Add Section ~~R331~~ R334 Fire Extinguishers.

~~65.~~ 49. Add Section ~~R331.1~~ R334.1 to read:

~~R331.1~~ R334.1 Kitchen areas. Other than where the dwelling is equipped with an approved sprinkler system in accordance with Section R313, a fire extinguisher having a rating of 2-A:10-B:C or an approved equivalent type of fire extinguisher shall be installed in the kitchen area.

~~66.~~ 50. Add Section ~~R332~~ R335 Interior Passage.

~~67.~~ 51. Add Sections ~~R332.1~~ R335.1 through ~~R332.6~~ R335.6 to read:

~~R332.1~~ R335.1 General. This section applies to new dwelling units that have both a kitchen and a living area on the same floor level as the egress door required by Section R311.2. This section is not applicable to additions, reconstruction, alteration, or repair.

~~R332.2~~ R335.2 Kitchen. One interior passage route from the egress door to the kitchen shall comply with ~~R332.6~~ R335.6.

~~R332.3~~ R335.3 Living area. One interior passage route from the egress door to at least one living area shall comply with ~~R332.6~~ R335.6.

~~R332.4~~ R335.4 Bedroom. Where the dwelling unit has a bedroom on the same floor level as the egress door, one interior passage route from the egress door to at least one bedroom shall comply with ~~R332.6.~~ R335.6.

~~R332.5~~ R335.5 Bathroom. Where a dwelling unit has a bathroom on the same floor level as the egress door, and the bathroom contains a water closet, lavatory, and bathtub or shower, one interior passage route from the egress door to at least one bathroom shall comply with ~~R332.6~~ R335.6. Bathroom fixture clearances shall comply with R307 and access to fixtures is not required to comply with ~~R332.6~~ R335.6.

~~R332.6~~ R335.6 Opening widths. Opening widths along the interior passage route required by this section shall comply with the following:

1. Cased openings shall provide a minimum 34 inch (864 mm) clear width.

2. Doors shall be a nominal 34 inch (864 mm) minimum width. Double doors are permitted to be used to meet this requirement.

~~68.~~ 52. Add Section ~~R333~~ R336 Tiny Houses.

~~69.~~ 53. Add Section ~~R333.1~~ R336.1 to read:

~~R333.1~~ R336.1 General. Appendix ~~Q~~ AQ may be used as an alternative to the requirements of this code where a dwelling is 400 square feet (37 m^2) or less in floor area.

~~70.~~ 54. Change Section R401.3 to read:

R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard to the dwelling unit. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of six inches (152 mm) within the first 10 feet (3048 mm).

Exception: Where lot lines, walls, slopes, or other physical barriers prohibit six inches (152 mm) of fall within 10 feet (3048 mm), drains or swales shall be constructed to ensure drainage away from the structure. Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 1.0% away from the building.

~~71.~~ 55. Add the following exceptions to Section R403.1 to read:

Exceptions:

1. One-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, not exceeding 256 square feet (~~23.7824~~ 24 m^2) of building area, provided that all of the following conditions are met:

1.1. The building eave height is 10 feet or less.

1.2. The maximum height from the finished floor level to grade does not exceed 18 inches (457 mm).

1.3. The supporting structural elements in direct contact with the ground shall be placed level on firm soil and when such elements are wood they shall be approved pressure preservative treated suitable for ground contact use.

1.4. The structure is anchored to withstand wind loads as required by this code.

1.5. The structure shall be of light-frame construction whose vertical and horizontal structural elements are primarily formed by a system of repetitive wood or light gauge steel framing members, with walls and roof of light weight material, not slate, tile, brick, or masonry.

2. Footings are not required for ramps serving dwelling units in Groups R-3 and R-5 occupancies where the height of the entrance is no more than 30 inches (762 mm) above grade.

~~72.~~ 56. Change Section R403.1.6 to read (exceptions remain):

R403.1.6 Foundation anchorage. Wood sill plates and wood walls supported directly on continuous foundations shall be anchored to the foundation in accordance with this section.

Cold-formed steel framing shall be anchored directly to the foundation or fastened to wood sill plates in accordance with Section R505.3.1 or R603.3.1, as applicable. Wood sill plates supporting cold-formed steel framing shall be anchored to the foundation in accordance with this section.

Wood foundation plates or sills shall be bolted or anchored to the foundation with not less than 1/2-inch-diameter (12.7 mm) steel bolts or approved anchors spaced to provide equivalent anchorage as the steel bolts. Bolts shall be embedded not less than ~~7~~ seven inches (178 mm) into concrete or grouted cells of concrete masonry units. The centerline of the bolts shall be located a minimum of 1.75 inches (44.5mm) from the edge of the sill plate. Bolts shall be spaced not more than ~~6~~ six feet (1829 mm) on center and there shall be not less than two bolts or anchor straps per piece with one bolt or anchor strap located not more than 12 inches (305 mm) or less than ~~4~~ four inches (102 mm) from each end of each piece. A properly sized nut and washer shall be tightened on each bolt to the plate. Interior bearing wall sole plates on monolithic slab foundation that are not part of a braced wall panel shall be positively anchored with approved fasteners. Sill plates and sole plates shall be protected against decay and termites where required by Sections R317 and R318. Anchor bolts shall be permitted to be located while concrete is still plastic and before it has set. Where anchor bolts resist placement or the consolidation of concrete around anchor bolts is impeded, the concrete shall be vibrated to ensure full contact between the anchor bolts and concrete.

~~Exceptions:~~

~~1. Walls 24 inches (610 mm) total length or shorter connecting offset braced wall panels shall be anchored to the foundation with not fewer than one anchor bolt located in the center third of the plate section and shall be attached to adjacent braced wall panels at corners as shown in Item 9 of Table R602.3(1).~~

~~2. Connection of walls 12 inches (305 mm) total length or shorter connecting offset braced wall panels to the foundation without anchor bolts shall be permitted. The wall shall be attached to adjacent braced wall panels at corners as shown in Item 9 of Table R602.3(1).~~

~~73.~~ 57. Delete Section R404.1.9.2.

~~74.~~ 58. Change ~~Sections R408.1, R408.2, and~~ Item 2.4 in Section R408.3 to read:

~~R408.1 Moisture control. The under-floor space between the bottom of the floor joists and the earth under any building (except space occupied by a basement) shall comply with Section R408.2 or R408.3.~~

~~R408.2 Openings for under-floor ventilation. Ventilation openings through foundation or exterior walls surrounding the under-floor space shall be provided in accordance with this section. The minimum net area of ventilation openings shall be not less than 1 square foot (0.0929 m^2) for each 150 square feet (14 m^2) of under-floor area. One ventilation opening shall be within 3 feet (915 mm) of each external corner of the under-floor space. Ventilation openings shall be covered for their height and width with any of the following materials provided that the least dimension of the covering shall not exceed 1/4 inch (6.4 mm), and operational louvers are permitted:~~

~~1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.~~

~~2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.~~

~~3. Cast iron grill or grating.~~

~~4. Extruded load-bearing brick vents.~~

~~5. Hardware cloth of 0.035 inch (0.89 mm) wire or heavier.~~

~~6. Corrosion-resistant wire mesh, with the least dimension being 1/8 inch (3.2 mm) thick.~~

~~Exceptions:~~

~~1. The total area of ventilation openings shall be permitted to be reduced to 1/1,500 of the under-floor area where the ground surface is covered with an approved Class I vapor retarder material.~~

~~2. Where the ground surface is covered with an approved Class I vapor retarder material, ventilation openings are not required to be within 3 feet (915 mm) of each external corner of the under-floor space provided the openings are placed to provide cross ventilation of the space.~~

~~R408.3 Unvented crawl space. For unvented under-floor spaces the following items shall be provided:~~

~~1. Exposed earth shall be covered with a continuous Class I vapor retarder. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend not less than 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall or insulation.~~

~~2. One of the following shall be provided for the under-floor space:~~

~~2.1. Continuously operated mechanical exhaust ventilation at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m^2) of crawl space floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.11 of this code.~~

~~2.2. Conditioned air supply sized to deliver at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square~~

~~feet (4.7 m^2) of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.11 of this code.~~

~~2.3. Plenum in existing structures complying with Section M1601.5, if under-floor space is used as a plenum.~~

2.4. Dehumidification sized to provide 70 pints (33 liters) of moisture removal per day for every 1,000 square feet (93 m^2) of crawl space floor area.

~~75. Change the exception to Section R408.2 to read:~~

~~Exception: The total area of ventilation openings shall be permitted to be reduced to 1/1,500 of the under-floor area where the ground surface is covered with an approved Class I vapor retarder material and the required openings are placed to provide cross ventilation of the space. The installation of operable louvers shall not be prohibited nor shall the required openings need to be within three feet (915 mm) of each corner provided there is cross ventilation of the space.~~

~~76.~~ 59. Add Section R408.3.1 to read:

R408.3.1 Termite inspection. Where an unvented crawl space is installed and meets the criteria in Section R408, the vertical face of the sill plate shall be clear and unobstructed and an inspection gap shall be provided below the sill plate along the top of any interior foundation wall covering. The gap shall be a minimum of one inch (25.4 mm) and a maximum of two inches (50.8 mm) in width and shall extend throughout all parts of any foundation that is enclosed. Joints between the sill plate and the top of any interior wall covering may be sealed.

Exceptions:

1. In areas not subject to damage by termites as indicated by Table ~~R301.2(1)~~ R301.2.

2. Where other approved means are provided to inspect for potential damage.

Where pier and curtain foundations are installed as depicted in Figure ~~R404.1.5(1)~~ R404.1.5.3, the inside face of the rim joist and sill plate shall be clear and unobstructed except for construction joints, which may be sealed.

Exception: Fiberglass or similar insulation may be installed if easily removable.

~~77.~~ 60. Change Section R506.2.1 to read:

R506.2.1 Fill. Fill material shall be free of vegetation and foreign material and shall be natural nonorganic material that is not susceptible to swelling when exposed to moisture. The fill shall be compacted to assure uniform support of the slab, and except where approved, the fill depth shall not exceed 24 inches (610 mm) for clean sand or gravel and ~~8~~ eight inches (203 mm) for earth.

Exception: Material other than natural material may be used as fill material when accompanied by a certification from an RDP and approved by the building official.

~~78.~~ 61. Change Section R506.2.2 to read:

R506.2.2 Base. A ~~4 inch thick~~ four-inch-thick (102 mm) base course consisting of clean graded sand, gravel, or crushed stone passing a ~~2 inch~~ two-inch (51 mm) sieve shall be placed on the prepared subgrade when the slab is below grade.

Exception: A base course is not required when the concrete slab is installed on well drained or sand-gravel mixture soils classified as Group I according to the United Soil Classification System in accordance with Table R405.1. Material other than natural material may be used as base course material when accompanied by a certification from an RDP and approved by the building official.

~~79.~~ 62. Change Section R602.10 to read:

R602.10 Wall bracing. Buildings shall be braced in accordance with this section or Section R602.12. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1.

The building official shall be permitted to require the permit applicant to identify braced wall lines and braced wall panels on the construction documents as described in this section and provide associated analysis. The building official shall be permitted to waive the analysis of the upper floors where the cumulative length of wall openings of each upper floor wall is less than or equal to the length of the openings of the wall directly below.

~~80. Change~~ 63. Add an exception to Section R602.10.9 to read:

~~R602.10.9 Braced wall panel support. Braced wall panel support shall be provided as follows:~~

~~1. Cantilevered floor joists complying with Section R502.3.3 shall be permitted to support braced wall panels.~~

~~2. Raised floor system post or pier foundations supporting braced wall panels shall be designed in accordance with accepted engineering practice.~~

~~3. Masonry stem walls with a length of 48 inches (1219 mm) or less supporting braced wall panels shall be reinforced in accordance with Figure R602.10.9. Masonry stem walls with a length greater than 48 inches (1219 mm) supporting braced wall panels shall be constructed in accordance with Section R403.1 Methods ABW and PFH shall not be permitted to attach to masonry stem walls.~~

~~4. Concrete stem walls with a length of 48 inches (1219 mm) or less, greater than 12 inches (305 mm) tall and less than 6 inches (152 mm) thick shall have reinforcement sized and located in accordance with Figure R602.10.9.~~

Exception: For masonry stem walls, an approved post-installed adhesive anchoring system shall be permitted as an alternative to the Optional Stem Wall Reinforcement detail in Figure R602.10.9. A minimum of two anchors shall be installed as indicated in Figure R602.10.9. Anchors shall be located not more than ~~4~~ four inches (102 mm) from each end of the stem wall. Anchors shall be installed into the concrete footing as follows:

1. Five-eighth inch (16 mm) treaded rod using a 3/4 inch (19 mm) diameter drilled hole with a minimum embedment of ~~6~~ six inches (152 mm).

2. Number 4 size reinforcing bar using a 5/8-inch (16 mm) diameter drilled hole with a minimum embedment of 4-1/2 inches (114 mm).

A minimum footing thickness of ~~8~~ eight inches (203 mm) is required and the minimum distance from each anchor to the edge of the footing shall be 3-3/4 inches (95 mm). The anchoring adhesive and anchors shall be installed in accordance with the manufacturer's instructions and have a minimum tensile capacity of 5,000 lbs. (22 kN). The bond beam reinforcement and attachment of braced wall panels to the stem wall shall be as shown in Figure R602.10.9.

~~81.~~ 64. Replace Section R602.12, including all subsections, with the following:

R602.12 Practical wall bracing. All buildings in Seismic Design Categories A and B and detached buildings in Seismic Design Category C shall be permitted to be braced in accordance with this section as an alternative to the requirements of Section R602.10. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1. The use of other bracing provisions of Section R602.10, except as specified ~~herein~~ in this section, shall not be permitted.

The building official shall be permitted to require the permit applicant to identify bracing on the construction documents and provide associated analysis. The building official shall be permitted to waive the analysis of the upper floors where the cumulative length of wall openings of each upper floor wall is less than or equal to the length of the openings of the wall directly below.

R602.12.1 Sheathing materials. The following materials shall be permitted for use as sheathing for wall bracing. Exterior walls shall be sheathed on all sheathable surfaces, including infill areas between bracing locations, above and below wall openings, and on gable end walls.

1. Wood structural panels with a minimum thickness of 7/16 inch (9.5 mm) fastened in accordance with Table R602.3(3).

2. Structural fiberboard sheathing with a minimum thickness of 1/2 inch (12.7 mm) fastened in accordance with Table R602.3(1).

3. Gypsum board with a minimum thickness of 1/2 inch (12.7 mm) fastened in accordance with Table R702.3.5 on interior walls only.

R602.12.2 Braced wall panels. Braced wall panels shall be full-height wall sections sheathed with the materials listed in Section R602.12.1 and complying with the following:

1. Exterior braced wall panels shall have a minimum length based on the height of the adjacent opening as specified in Table R602.12.2. Panels with openings on both sides of differing heights shall be governed by the taller opening when determining panel length.

2. Interior braced wall panels shall have a minimum length of 48 inches (1220 mm) when sheathing material is applied to one side. Doubled-sided applications shall be permitted to be considered two braced wall panels.

3. Braced wall panels shall be permitted to be constructed of Methods ABW, PFH, PFG, and CS-PF in accordance with Section R602.10.4.

4. Exterior braced wall panels, other than the methods listed in Item 3 ~~above~~ shall have a finish material installed on the interior. The finish material shall consist of 1/2 inch (12.7 mm) gypsum board or equivalent and shall be permitted to be omitted where the required length of bracing, as determined in Section R602.12.4, is multiplied by 1.40, unless otherwise required by Section R302.6.

5. Vertical sheathing joints shall occur over and be fastened to common studs.

6. Horizontal sheathing joints shall be edge nailed to 1-1/2 inch (38 mm) minimum thick common blocking.

Table R602.12.2
Braced Wall Panel Lengths

Location	Wall Height (feet)				
	8	9	10	11	12
	Minimum Panel Length (inches)				
Adjacent garage door of one-story garage[a]	24	27	30	33	36
Adjacent all other openings[b]					
Clear opening height (inches) ≤ 64	24	27	30	33	36
Clear opening height (inches) ≤ 72	27	27	30	33	36
Clear opening height (inches) ≤ 80	30	30	30	33	36

Clear opening height (inches) > 80	36	36	36	40	40

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. Braced wall panels supporting a gable end wall or roof load only.

b. Interpolation shall be permitted.

R602.12.3 Circumscribed rectangle. Required length of bracing shall be determined by circumscribing one or more rectangles around the entire building or portions thereof as shown in Figure R602.12.3. Rectangles shall surround all enclosed offsets and projections, such as sunrooms and attached garages. Chimneys, partial height projections, and open structures, such as carports and decks, shall be excluded from the rectangle. Each rectangle shall have no side greater than 80 feet (24,384 mm) with a maximum 3:1 ratio between the long and short side. Rectangles shall be permitted to be skewed to accommodate angled projections as shown in Figure R602.12.4.3.

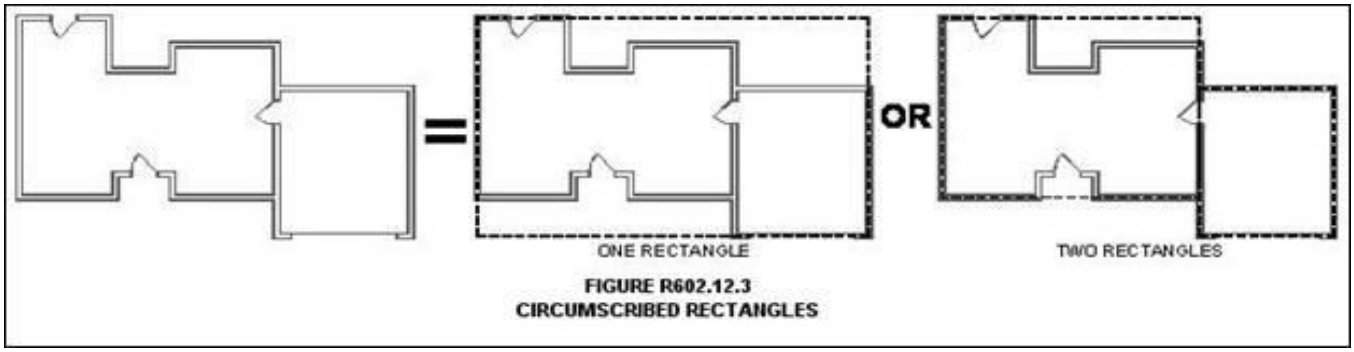


FIGURE R602.12.3
CIRCUMSCRIBED RECTANGLES

R602.12.4 Required length of bracing. The required length of bracing for each side of a circumscribed rectangle shall be determined using Table R602.12.4. Where multiple rectangles share a common side or sides, the required length of bracing shall equal the sum of the required lengths from all shared rectangle sides.

Table R602.12.4
Required Length of Bracing Along Each Side of a Circumscribed Rectangle[a,b,c]

Wind Speed	Eave-to-Ridge Height (feet)	Number of Floor Levels Above[e,f]	Required Length of Bracing on Front/Rear Side (feet)								Required Length of Bracing on Left/Right Side (feet)							
			Length of Left/Right Side (feet)								Length of Front/Rear Side (feet)							
			10	20	30	40	50	60	70	80	10	20	30	40	50	60	70	80
115	10	0	2.0	3.5	5.0	6.0	7.5	9.0	10.5	12.0	2.0	3.5	5.0	6.0	7.5	9.0	10.5	12.0
		1[d]	3.5	6.5	9.0	12.0	14.5	17.0	19.8	22.6	3.5	6.5	9.0	12.0	14.5	17.0	19.8	22.6
		2[d]	5.0	9.5	13.5	17.5	21.5	25.0	29.2	33.4	5.0	9.5	13.5	17.5	21.5	25.0	29.2	33.4
	15	0	2.6	4.6	6.5	7.8	9.8	11.7	13.7	15.7	2.6	4.6	6.5	7.8	9.8	11.7	13.7	15.7
		1[d]	4.0	7.5	10.4	13.8	16.7	19.6	22.9	26.2	4.0	7.5	10.4	13.8	16.7	19.6	22.9	26.2
		2[d]	5.5	10.5	14.9	19.3	23.7	27.5	32.1	36.7	5.5	10.5	14.9	19.3	23.7	27.5	32.1	36.7
	20	0	2.9	5.2	7.3	8.8	11.1	13.2	15.4	17.6	2.9	5.2	7.3	8.8	11.1	13.2	15.4	17.6
		1[d]	4.5	8.5	11.8	15.6	18.9	22.1	25.8	29.5	4.5	8.5	11.8	15.6	18.9	22.1	25.8	29.5
		2[d]	6.2	11.9	16.8	21.8	27.3	31.1	36.3	41.5	6.2	11.9	16.8	21.8	27.3	31.1	36.3	41.5
130	10	0	2.5	4.0	6.0	7.5	9.5	11.0	12.8	14.6	2.5	4.0	6.0	7.5	9.5	11.0	12.8	14.6
		1[d]	4.5	8.0	11.0	14.5	18.0	21.0	24.5	28.0	4.5	8.0	11.0	14.5	18.0	21.0	24.5	28.0
		2[d]	6.0	11.5	16.5	21.5	26.5	31.0	36.2	41.4	6.0	11.5	16.5	21.5	26.5	31.0	36.2	41.4
	15	0	3.4	5.2	7.8	9.8	12.4	14.3	16.7	19.1	3.4	5.2	7.8	9.8	12.4	14.3	16.7	19.1

		1[d]	5.2	9.2	12.7	16.7	20.7	24.2	28.2	32.2	5.2	9.2	12.7	16.7	20.7	24.2	28.2	32.2
		2[d]	6.6	12.7	18.2	23.7	29.2	34.1	39.8	45.5	6.6	12.7	18.2	23.7	29.2	34.1	39.8	45.5
	20	0	3.8	5.9	8.8	11.1	14.0	16.2	18.9	21.6	3.8	5.9	8.8	11.1	14.0	16.2	18.9	21.6
		1[d]	5.9	10.4	14.4	18.9	23.4	27.3	31.8	36.3	5.9	10.4	14.4	18.9	23.4	27.3	31.8	36.3
		2[d]	7.5	14.4	20.6	26.8	33.0	38.5	44.9	51.3	7.5	14.4	20.6	26.8	33.0	38.5	44.9	51.3

For SI: 1 ft = 304.8 mm.

a. Interpolation shall be permitted; extrapolation shall be prohibited.

b. For Exposure Category C, multiply the required length of bracing by a factor of 1.20 for a one-story building, 1.30 for a two-story building, and 1.40 for a three-story building.

c. For wall height adjustments multiply the required length of bracing by the following factors: 0.90 for 8 feet (2438 mm), 0.95 for 9 feet (2743 mm), 1.0 for 10 feet (3048 mm), 1.05 for 11 feet (3353 mm), and 1.10 for 12 feet (3658 mm).

d. Where braced wall panels supporting stories above have been sheathed in wood structural panels with edge fasteners spaced at 4 inches (102 mm) on center, multiply the required length of bracing by 0.83.

e. A floor level, habitable or otherwise, contained wholly within the roof rafters or trusses shall not be considered a floor level for purposes of determining the required length of bracing.

f. A rectangle side with differing number of floor levels above shall use the greatest number when determining the required length of bracing.

R602.12.4.1 Braced wall panel assignment to rectangle sides. Braced wall panels shall be assigned to the applicable rectangle side and contribute to its required length of bracing. Panels shall be assigned as specified ~~below~~ in Items 1, 2, and 3 and as shown in Figure R602.12.4.1.

1. Exterior braced wall panels shall be assigned to the parallel rectangle side on which they are located or in which they face.

2. Interior braced wall panels shall be assigned to the parallel rectangle side on which they are located or in which they face up to ~~4~~ four feet (1220 mm) away. Interior braced wall panels more than ~~4~~ four feet (1220 mm) away from a parallel rectangle side shall not contribute.

3. The projections of angled braced wall panels shall be assigned to the adjacent rectangle sides.

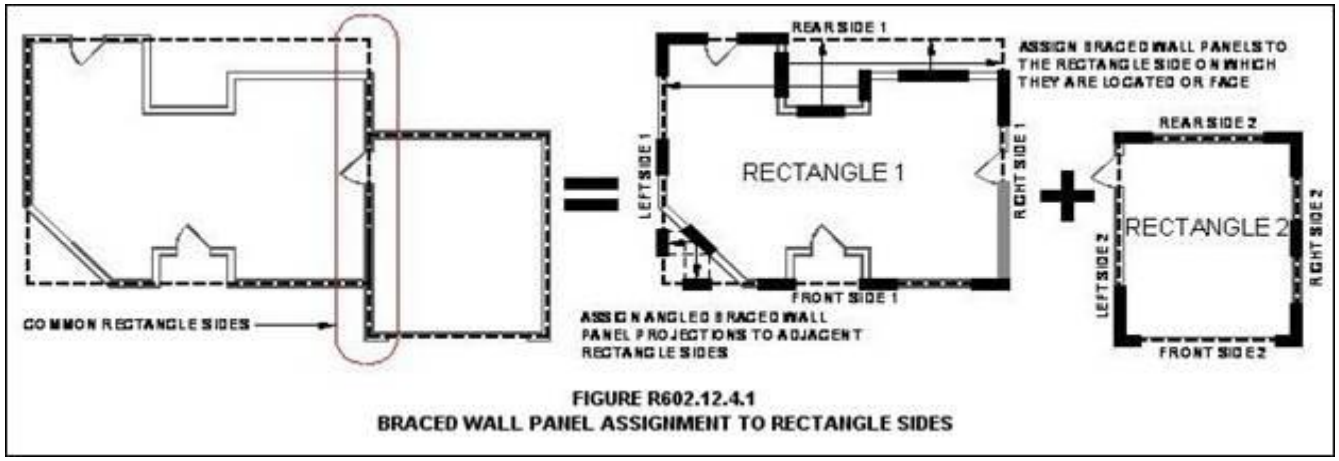


FIGURE R602.12.4.1
BRACED WALL PANEL ASSIGNMENT TO RECTANGLE SIDES

R602.12.4.2 Contributing length. The cumulative contributing length of braced wall panels assigned to a rectangle side shall be greater than or equal to the required length of bracing as determined in Section R602.12.4. The contributing length of a braced wall panel shall be as specified ~~below~~ in Items I, 2, and 3. When applying contributing length to angled braced wall panels, apply the requirements ~~below~~ in Items I, 2, and 3 to each projection:

1. Exterior braced wall panels shall contribute their actual length.

2. Interior braced wall panels shall contribute one-half of their actual length.

3. The contributing length of Methods ABW, PFH, PFG, and CS-PF shall be in accordance with Table R602.10.5.

R602.12.4.3 Common sides with skewed rectangles. Braced wall panels located on a common wall where skewed rectangles intersect, as shown in Figure R602.12.4.3, shall be permitted to be assigned to the parallel rectangle side, and their projections shall be permitted to be assigned to the adjacent skewed rectangle sides.

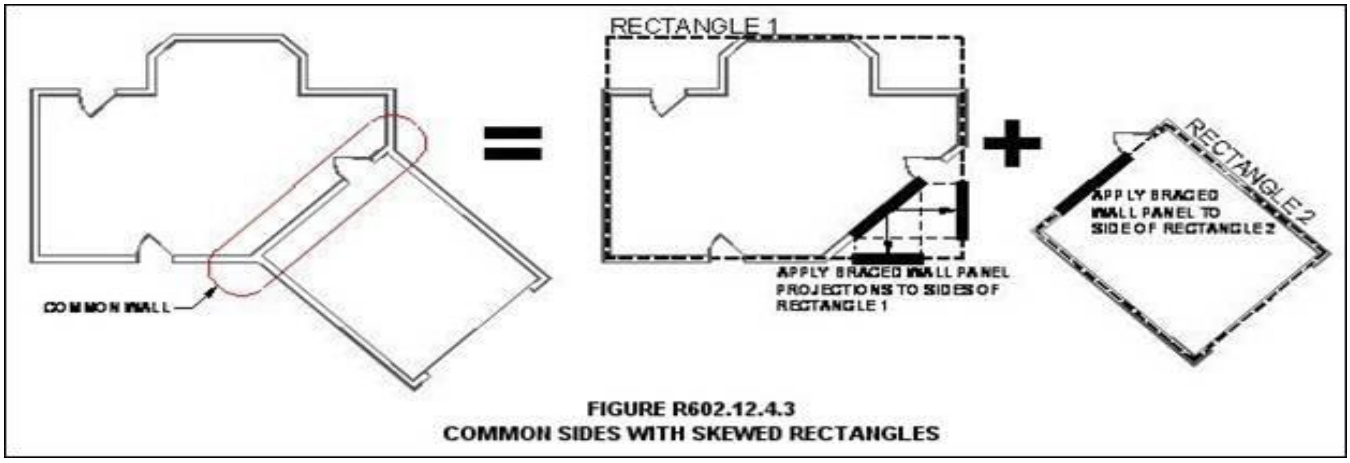


FIGURE R602.12.4.3
COMMON SIDES WITH SKEWED RECTANGLES

R602.12.5 Cripple walls and framed walls of walk-out basements. For rectangle sides with cripple walls having a maximum height of 48 inches (1220 mm), the required length of bracing shall be as determined in Section R602.12.4. For rectangle sides with cripple walls having a height greater than 48 inches (1220 mm) at any location or framed walls of a walk-out basement, the required length of bracing shall be determined using Table R602.12.4. Braced wall panels within cripple walls and walls of walk-out basements shall comply with Item 4 of Section R602.12.2.

R602.12.6 Distribution of braced wall panels. Braced wall panels shall be distributed in accordance with the following requirements as shown in Figure R602.12.6.

1. The edge of a braced wall panel shall be no more than 12 feet (3658 mm) from any building corner or rectangle corner.
2. The distance between adjacent edges of braced wall panels shall be no more than 20 feet (6096 mm).
3. Segments of exterior walls greater than ~~8~~ eight feet (2438 mm) in length shall have a minimum of one braced wall panel.
4. Segments of exterior wall ~~8~~ eight feet (2438 mm) or less in length shall be permitted to have no braced wall panels.

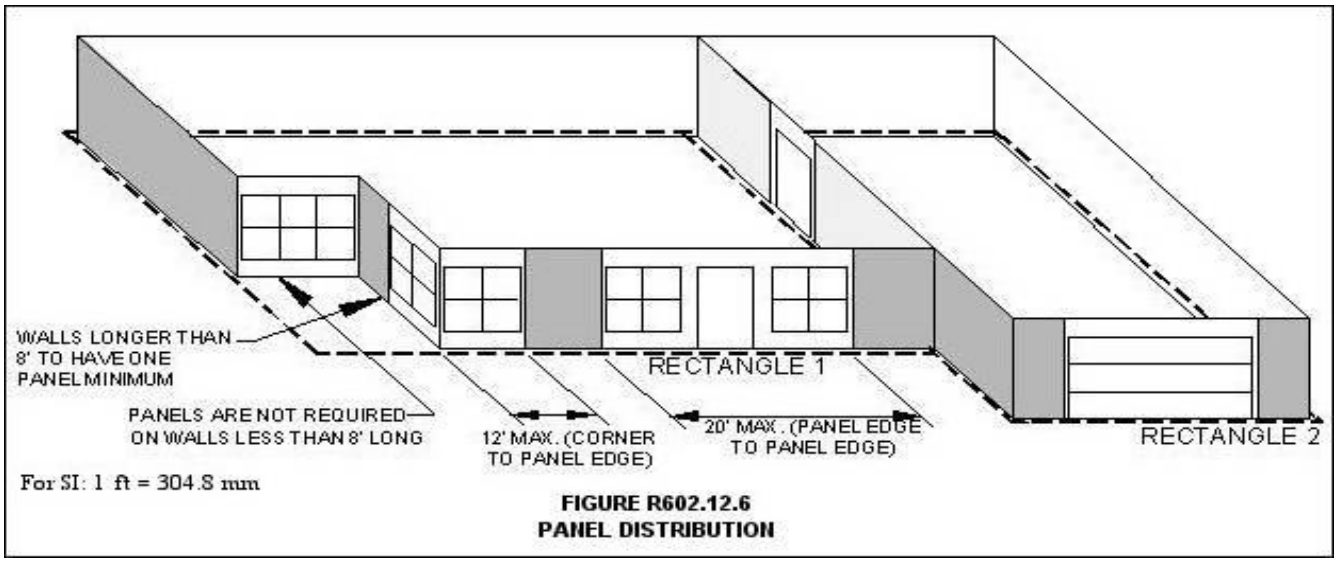


FIGURE R602.12.6
PANEL DISTRIBUTION

R602.12.6.1 Panels adjacent to balloon framed walls. Braced wall panels shall be placed on each side of each story adjacent to balloon framed walls designed in accordance with Section R602.3 with a maximum height of two stories.

R602.12.7 Braced wall panel connection. Braced wall panels shall be connected to other structural elements in accordance with Section R602.10.8.

R602.12.8 Braced wall panel support. Braced wall panels shall be supported in accordance with Section R602.10.9.

~~82. Change Section R609.4 to read:~~

~~R609.4 Garage doors. Garage doors shall be tested in accordance with either ASTM E330 or ANSI/DASMA 108, and shall meet the pass/fail criteria of ANSI/DASMA 108.~~

~~83. Add Section R609.4.1 to read:~~

~~R609.4.1 Garage door labeling. Garage doors shall be labeled with a permanent label affixed to the garage door by the manufacturer. The label shall identify the garage door manufacturer, the garage door model/series number, the positive and negative design wind pressure rating, the installation instruction drawing reference number, and the applicable test standard.~~

~~84.~~ 65. Delete Section R905.2.8.5.

~~85.~~ 66. Change Section R1001.8 to read:

R1001.8 Smoke chamber. Smoke chamber walls shall be constructed of solid masonry units, hollow masonry units grouted solid, stone, or concrete. The total minimum thickness of front, back, and side walls shall be ~~8~~ eight inches (203 mm) of solid masonry. When the inside surface of the smoke chamber is formed by corbelled masonry, the inside surface shall be parged smooth. When a lining of firebrick at least ~~2~~ two inches (51 mm) thick~~,~~ or a lining of vitrified clay at least 5/8 inch (16 mm) thick~~,~~ is provided, the total minimum thickness of front, back, and side walls shall be ~~6~~ six inches (152 mm) of solid masonry, including the lining. Firebrick shall conform to ASTM C 1261 and shall be laid with medium duty refractory mortar conforming to ASTM C 199. Vitrified clay linings shall conform to ASTM C 315.

~~86. Change Section N1101.13 (R401.2) to read:~~

~~N1101.13 (R401.2) Compliance. Projects shall comply with all provisions of Chapter 11 labeled "Mandatory" and one of the following:~~

~~1. Sections N1101.14 through N1104.~~

~~2. Section N1105.~~

~~3. Section N1106.~~

~~4. The most recent version of REScheck, keyed to the 2018 IECC.~~

~~87. Change Section N1101.14 (R401.3). to read:~~

~~N1101.14 (R401.3) Certificate mandatory. A permanent certificate shall be completed by the builder or other approved party and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label, or other required labels. The certificate shall indicate the predominant R-values of insulation installed in or on ceilings, roofs, walls, or foundation components, such as slabs, basement walls, crawl space walls, and floors and ducts outside conditioned spaces; U-factors of fenestration and the solar heat gain coefficient (SHGC) of fenestration; and the results from any required duct system and building envelope air leakage testing performed on the building. Where there is more than one value for each component, the certificate shall indicate the value covering the largest area. The certificate shall indicate the types and efficiencies of heating, cooling, and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall indicate "gas-fired unvented room heater," "electric furnace," or "baseboard electric heater," as appropriate. An efficiency shall not be indicated for gas-fired unvented room heaters, electric furnaces, and electric baseboard heaters.~~

~~88.~~ 67. Change the wood frame wall R-value categories for ~~climate zone "4 Except Marine"~~ Climate Zones 3A, 4A, and 5A in Table ~~N1102.1.2 (R402.1.2)~~ N1102.1.3 (R402.1.3) to read:

	Wood Frame Wall R-Value
	15 or 13 + 1[h]

~~89.~~ 68. Change the frame wall U-factor categories for ~~climate zone "4 Except Marine"~~ Climate Zones 3A, 4A, and 5A in Table ~~N1102.1.4 (R402.1.4)~~ N1102.1.2 (R402.1.2) to read:

	Frame Wall U-Factor
	0.079

~~90.~~ 69. Change Section N1102.2.4 (R402.2.4) to read:

N1102.2.4 (R402.2.4) Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weatherstripped and insulated in accordance with the following values:

1. Hinged vertical doors shall have a minimum overall R-5 insulation value;

2. Hatches and scuttle hole covers shall be insulated to a level equivalent to the insulation on the surrounding surfaces; and

3. Pull down stairs shall have a minimum of 75% of the panel area having R-5 rigid insulation.

Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened~~,~~ and to provide a permanent means of maintaining the installed R-value of the loose fill insulation.

~~91. Change Sections N1102.4 (R402.4) and N1102.4.1.1 (R402.4.1.1) to read:~~

~~N1102.4 (R402.4) Air leakage. The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections N1102.4.1 through N1102.4.5.~~

~~N1102.4.1.1 (R402.4.1.1) Installation (Mandatory). The components of the building thermal envelope as listed in Table N1102.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table N1102.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.~~

~~92.~~ 70. Change the title of the "Insulation Installation Criteria" category of Table N1102.4.1.1 (R402.4.1.1); change the "Shower/tub on exterior wall" category of Table N1102.4.1.1 (R402.4.1.1), and add footnotes ~~"b" and~~ "c" and "d" to Table N1102.4.1.1 (R402.4.1.1) to read:

Component	Air Barrier Criteria	Insulation Installation Criteria[~~b~~ d]
Shower/tub on exterior wall[c]	The air barrier installed at exterior walls adjacent to showers and tubs shall be installed on the interior side and separate the exterior walls from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.
c. Air barriers used behind showers and tubs on exterior walls shall be of a permeable material that does not cause the entrapment of moisture in the stud cavity. ~~b.~~ d. Structural integrity of headers shall be in accordance with the applicable building code.		

~~93.~~ 71. Change Section N1102.4.1.2 (R402.4.1.2) to read (exception remains):

N1102.4.1.2 (R402.4.1.2) Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour in Climate Zone 4. Testing shall be conducted in accordance with RESNET/ICC 380, ASTM E 779, or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pa). A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be conducted by a Virginia licensed general contractor, a Virginia licensed HVAC contractor, a Virginia licensed home inspector, a Virginia registered design professional, a certified BPI Envelope Professional, a certified Home Energy Rating System (HERS) rater, or a certified duct and envelope tightness rater. The party conducting the test shall have been trained on the equipment used to perform the test. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Note: Should additional sealing be required as a result of the test, consideration may be given to the issuance of temporary certificate of occupancy in accordance with Section 116.1.1.

During testing:

1. Exterior windows and doors and fireplace and stove doors shall be closed, but not sealed beyond the intended weatherstripping or other infiltration control measures;

2. Dampers, including exhaust, intake, makeup air, backdraft, and flue dampers, shall be closed~~,~~ but not sealed beyond intended infiltration control measures;

3. Interior doors, if installed at the time of the test, shall be open;

4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;

5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and

6. Supply and return registers, if installed at the time of the test, shall be fully open.

72. Change Section N1102.4.1.3 (R402.4.1.3) to read:

R402.4.1.3 Leakage rate. When complying with Section N1101.2.1 (R401.2.1), the building or dwelling unit shall have an air leakage rate not exceeding 5.0 air changes per hour in Climate Zones 3, 4, and 5 when tested in accordance with Section N1102.4.1.2 (R402.4.1.2).

73. Add Section N1103.1.3 (R403.1.3) to read:

R403.1.3 Heat pump as primary space heat source. Electric resistance heat shall not be used as the primary heat source for electric space heating if a ducted or ductless heat pump can be installed. Electric resistance space heating may be used for defrost, supplemental, or emergency heat. A heat pump shall be designed so that, except during defrost or emergency heating modes, supplemental heating does not energize unless the outdoor temperature is below 40ºF (4ºC).

~~94.~~ 74. Change the last paragraph of Section ~~N1103.3.3 (R403.3.3)~~ N1103.3.5 (R403.3.5) to read:

~~N1103.3.3 (R403.3.3) Duct testing (Mandatory). Ducts shall be pressure tested to determine air leakage by one of the following methods:~~

~~1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.~~

~~2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.~~

~~Exception: A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.~~

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. The licensed mechanical contractor installing the mechanical system shall be permitted to perform the duct testing. The contractor shall have been trained on the equipment used to perform the test.

~~95. Delete~~ 75. Change Section ~~N1103.3.5 (R403.3.5).~~ N1103.3.7 (R403.3.7) to read:

N1103.3.7 (R403.3.7) Building cavities. Building framing cavities used as ducts or plenums shall comply with VRC Section M1601.1.1.

~~96.~~ 76. Change Section N1103.7 (R403.7) to read:

N1103.7 (R403.7) Equipment and appliance sizing. Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliance sizing shall not be limited to the capacities determined in accordance with Manual S or other approved sizing methodologies where any of the following conditions apply:

1. The specified equipment or appliance utilizes multi-stage technology or variable refrigerant flow technology and the loads calculated in accordance with the approved heating and cooling methodology fall within the range of the manufacturer's published capacities for that equipment or appliance.

2. The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with the approved heating and cooling methodology and the next larger standard size unit is specified.

3. The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

~~97.~~ 77. Change ~~footnote for Table N1106.4 (R406.4)~~ Section N1106.3.2 (R406.3.2) to read:

Section N1106.3.2 (R406.3.2) Onsite renewables are included. When onsite renewable energy is included for compliance using the Energy Rating Index (ERI) analysis per Section N1106.4 (R406.4), the building thermal envelope shall be greater than or equal to levels of energy efficiency and solar heat gain coefficient in Table N1102.1.2 (R402.1.2), with a ceiling R-value of 49 and a wood frame wall R-value of 20 or 13+5, or Table N1102.1.3 (R402.1.3), with a ceiling U-factor of 0.026 and a frame wall U-factor of 0.060.

~~a. When onsite renewable energy is included for compliance using the ERI analysis per Section N1106.4 (R406.4), the building shall meet the mandatory requirements of Section N1106.2 (R406.2) and the building thermal envelope shall be greater than or equal to levels of energy efficiency and solar heat gain coefficient in Table N1102.1.2 (R402.1.2), with a ceiling R-value of 49 and a wood frame wall R-value of 20 or 13+5, or Table N1102.1.4 (R402.1.4), with a ceiling U-factor of 0.026 and a frame wall U-factor of 0.060.~~

~~98.~~ 78. Change Section ~~N1107.1~~ N1109.1 (R501.1) and delete Sections ~~N1107.1.1~~ N1109.1.1 (R501.1.1) through ~~N1107.6~~ N1109.6 (R501.6).

~~N1107.1~~ N1109.1 (R501.1) Scope. The provisions of the Virginia Existing Building Code shall control the alteration, repair, addition, and change of occupancy of existing buildings and structures.

~~99.~~ 79. Change Section ~~N1108.1~~ N1110.1 (R502.1) and delete Sections ~~N1108.1.1 (R502.1.1)~~ N1110.2 (R502.2) through ~~N1108.1.2 (R502.1.2)~~ N1110.3.4 (R502.3.4).

~~N1108.1 (R502.1.1)~~ N1110.1 (R502.1) General. Additions to an existing building, building system, or portion thereof shall conform to the provisions of Section ~~811~~ 805 of the VEBC.

~~100.~~ 80. Change Section ~~N1109.1~~ N1111.1 (R503.1) and delete Sections ~~N1109.1.1~~ N1111.1.1 (R503.1.1) through ~~N1109.2 (R503.2)~~ N1111.1.4 (R503.1.4).

~~N1109.1~~ N1111.1 (R503.1) General. Alterations to any building or structure shall comply with the requirements of Chapter 6 of the VEBC.

~~101.~~ 81. Change Section ~~N1110.1~~ N1112.1 (R504.1) and delete Section ~~N1110.2~~ N1112.2 (R504.2).

~~N1110.1~~ N1112.1 (R504.1) General. Buildings and structures, and parts thereof, shall be repaired in compliance with Section ~~510~~ 507 of the VEBC.

~~102. Delete Section N1109.1.1.1 (R503.1.1.1).~~

~~103.~~ 82. Change Section M1401.3 to read:

M1401.3 Equipment and appliance sizing. Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated

in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliance sizing shall not be limited to the capacities determined in accordance with Manual S or other approved sizing methodologies where any of the following conditions apply:

1. The specified equipment or appliance utilizes multi-stage technology or variable refrigerant flow technology and the loads calculated in accordance with the approved heating and cooling methodology fall within the range of the manufacturer's published capacities for that equipment or appliance.

2. The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with the approved heating and cooling methodology, and the next larger standard size unit is specified.

3. The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

~~104.~~ 83. Change Section M1404.1 to read:

M1404.1 Compliance. Refrigeration cooling equipment shall comply with UL 474, UL484, UL1995, or UL/CSA 60335-2-40.

84. Add Sections M1411.1.1 through M1411.1.6 to read:

M1411.1.1 Refrigeration system listing. Refrigeration systems using Group A2L refrigerants shall be listed and labeled to UL 60335-2-40/CAN/CSA C22.2 No. 60335-2-40. Refrigeration systems using Group A1 refrigerants shall be listed to UL 60335-2-40/CAN/CSA C22.2 No. 6-335-2-40 or UL 1995/CSA C22.2 No. 236. The equipment shall be installed in accordance with the listing.

M1411.1.2 Refrigeration system installation. Refrigeration systems shall be installed in accordance with the manufacturer's installation instructions. After installation, the manufacturer's installation instructions, owner's manuals, service manuals, and any other product literature provided with the equipment shall be attached to the indoor unit or left with the homeowner.

M1411.1.3 Field installed accessories. All Field installed accessories shall be installed in accordance with the accessory and equipment manufacturer's installation instructions. Accessories installed in the ductwork of Group A2L refrigeration systems shall not contain electric heating elements, open flames, or devices switching electrical loads greater than 2.5 kVA.

M1411.1.4 Signs and identification. Each refrigeration system using Group A2L refrigerant shall have the following information legibly and permanently indicated on a markable label provided by the equipment manufacturer.

1. Contact information of the responsible company that installed the refrigeration system, and

2. The system refrigerant charge and the refrigerant number.

M1411.1.5 Refrigerant charge. All refrigeration systems shall have refrigerant charge in compliance with the equipment manufacturer's installation instructions and the requirements of the listing. Group A2L refrigerant charge for an individual refrigeration system shall not exceed 34.5 lbs (15.7 kg).

M1411.1.6 Group A2L refrigerant piping testing. The piping system containing Group A2L refrigerant shall be tested in accordance with the manufacturer's installation instructions and the requirements of the listing.

85. Add Section M1501.2 to read:

M1501.2 Transfer air. Air transferred from occupiable spaces other than kitchens, baths, and toilet rooms shall not be prohibited from serving as makeup air for exhaust systems. Transfer openings between spaces shall be of the same cross-sectional area as the free area of the makeup air openings. Where louvers and grilles are installed, the required size of openings shall be based on the net free area of each opening. Where the design and free area of louvers and grilles are not known, it shall be assumed that wood louvers will have 25% free area and metal louvers and grilles will have 75% free area.

~~105.~~ 86. Change Section M1502.4.2 to read:

M1502.4.2 Duct installation. Exhaust ducts shall be supported at ~~4 foot~~ four-foot (1219 mm) intervals and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

~~106.~~ 87. Change Section M1503.6 to read:

M1503.6 Makeup air required. Exhaust hood systems capable of exhausting more than 400 cubic feet per minute (0.19 m^3/s) shall be provided with makeup air at a rate approximately equal to the exhaust air rate in excess of 400 cubic feet per minute (0.19 m^3/s). Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Exception: Intentional openings for makeup air are not required for kitchen exhaust systems capable of exhausting not greater than 600 cubic feet per minute (0.28 m^3/s) provided that one of the following conditions is met:

1. Where the floor area within the air barrier of a dwelling unit is at least 1,500 square feet (139.35 m^2), and where

natural draft or mechanical draft space-heating or water-heating appliances are not located within the air barrier.

2. Where the floor area within the air barrier of a dwelling unit is at least 3,000 square feet (278.71 m^2), and where natural draft space-heating or water-heating appliances are not located within the air barrier.

~~107.~~ 88. Add an exception to ~~item~~ Item 7 in Section M1602.2 to read:

Exception: The return air within a two-family dwelling constructed without fire separations in accordance with Exception 3 of Section R302.3 shall be permitted to discharge into either dwelling unit.

~~108.~~ 89. Add Section M1801.1.1 to read:

M1801.1.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection ~~or inspections~~ shall be conducted to ensure that the connected vent or chimney systems comply with the following:

1. Vent or chimney systems are sized in accordance with this code.

2. Vent or chimney systems are clean, free of any obstruction or blockages, defects, or deterioration and are in operable condition.

Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.

~~109. Change Sections G2411.1 and G2411.2 to read:~~

~~G2411.1 Pipe and tubing. Each above-group portion of a gas piping system that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance. Corrugated stainless steel tubing (CSST) piping systems listed with an arc-resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26 shall comply with this section. Where any CSST segments of a piping system are not listed with an arc-resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26, Section G2411.2 shall apply.~~

~~G2411.2 CSST without arc-resistant jacket or coating system. CSST gas piping systems and piping systems containing one or more segments of CSST not listed with an arc-resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26 shall be bonded to the electrical service grounding electrode system or, where provided, the lightning protection electrode system and shall comply with Sections G2411.2.1 through G2411.2.5.~~

~~110.~~ 90. Add Section G2425.1.1 to read:

G2425.1.1 Equipment changes. Upon the replacement or new installation of any fuel-burning appliances or equipment in existing buildings, an inspection ~~or inspections~~ shall be conducted to ensure that the connected vent or chimney systems comply with the following:

1. Vent or chimney systems are sized in accordance with this code.

2. Vent or chimney systems are clean, free of any obstruction or blockages, defects, or deterioration and are in operable condition.

Where not inspected by the local building department, persons performing such changes or installations shall certify to the building official that the requirements of Items 1 and 2 of this section are met.

~~111.~~ 91. Change Section G2439.7.2 to read:

G2439.7.2 Duct installation. Exhaust ducts shall be supported at ~~4-foot~~ four-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

~~112.~~ 92. Change Section P2601.2 to read:

P2601.2 Connections. Plumbing fixtures, drains, and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems.

Exception: Bathtubs, showers, lavatories, clothes washers, and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved nonpotable gray water system in accordance with the applicable provisions of Sections P2910, P2911, and P2912.

~~113.~~ 93. Change Section P2602.1 to read:

P2602.1 General. The water and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public or private water supply and a public or private sewer system. As provided for in Section 103.5 of Part I of the Virginia Uniform Statewide Building Code (13VAC5-63) for functional design, water supply sources and sewage disposal systems are regulated and approved by the Virginia Department of Health and the Virginia Department of Environmental Quality.

Note: See also the Memorandums of Agreement in the "Related Laws Package," which is available from the Virginia Department of Housing and Community Development.

~~114.~~ 94. Add Section P2602.3 to read:

P2602.3 Tracer wire. Nonmetallic water service piping that connects to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product~~,~~ shall be utilized. The wire shall be installed in the same trench as the water service piping and within 12 inches (305 mm) of the pipe and shall be installed to within five feet (1524 mm) of the building wall to the point where the building water service pipe intersects with the public water supply. At a minimum, one end of the wire shall terminate above grade to provide access to the wire in a location that is resistant to physical damage, such as with a meter vault or at the building wall.

~~115.~~ 95. Change Section P2801.6 to read:

P2801.6 Required pan. Where a storage tank-type water heater or a hot water storage tank is installed in a location where water leakage from the tank will cause damage, the tank shall be installed in a pan constructed of one of the following:

1. Galvanized steel or aluminum of not less than 0.0236 inch (0.6010 mm) in thickness.

2. Plastic not less than 0.036 inch (0.9 mm) in thickness.

3. Other ~~approves~~ approved materials.

A plastic pan shall not be installed beneath a gas-fired water heater.

~~116.~~ 96. Add Section P2901.1.1 to read:

P2901.1.1 Nonpotable fixtures and outlets. Nonpotable water shall be permitted to serve nonpotable type fixtures and outlets in accordance with the applicable provisions of Sections P2910, P2911, and P2912.

97. Change Section P2902.6 of the IRC to read:

P2902.6 Location of backflow preventers. Access for inspection, testing, service, repair, and replacement shall be provided to backflow prevention assemblies. Backflow prevention assemblies shall be installed between 12 inches (305 mm) and 60 inches (1525 mm) from grade, floor level or service platform and as specified by the manufacturer's instructions. Where the manufacturer's listed installation height conflicts with this requirement, the manufacturer's listed heights shall apply. Access shall be provided to backflow prevention devices and as specified by the manufacturer's instructions.

~~117.~~ 98. Change Section P2903.5 to read:

P2903.5 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized, unless otherwise approved. Water hammer arrestors shall be installed in accordance with manufacturer's specifications. Water hammer arrestors shall conform to ASSE 1010.

~~118.~~ 99. Change Section P2904.1 to read:

P2904.1 General. The design and installation of residential fire sprinkler systems shall be in accordance with NFPA 13D, NFPA 13, NFPA 13R, or Section P2904, which shall be considered to be equivalent to NFPA 13D. Partial residential sprinkler systems shall be permitted to be installed only in buildings not required to be equipped with a residential sprinkler system. Section P2904 shall apply to stand-alone and multipurpose wet-pipe sprinkler systems that do not include the use of antifreeze. A multipurpose fire sprinkler system shall provide domestic water to both fire sprinklers and plumbing fixtures. A stand-alone sprinkler system shall be separate and independent from the water distribution system. A backflow preventer shall not be required to separate a sprinkler system from the water distribution system, provided that the sprinkler system complies with all of the following:

1. The system complies with NFPA 13D, NFPA 13, NFPA 13R, or Section P2904.

2. The piping material complies with Section P2906.

3. The system does not contain antifreeze.

4. The system does not have a fire department connection.

~~119.~~ 100. Change Section P2906.2.1 to read:

P2906.2.1 Lead content of drinking water pipe and fittings. Pipe, pipe fittings, joints, valves, faucets, and fixture fittings utilized to supply water for drinking or cooking purposes shall comply with NSF 372.

101. Change Section P2906.9.1.2 to read:

P2906.9.1.2 Chlorinated polyvinyl chloride (CPVC) plastic pipe. Joint surfaces shall be clean and free from moisture. Joints shall be made in accordance with the pipe, fitting or solvent cement manufacturer's installation instructions. Where such instructions require a primer to be used, an approved primer shall be applied, and a solvent cement, orange in color and conforming to ASTM F493, shall be applied to joint surfaces. Where such instructions allow for a one-step solvent cement, yellow, red or green in color and conforming to ASTM F493, to be used, the joint surfaces shall not require application of a primer before the solvent cement is applied. The joint shall be made while the cement is wet and in accordance with ASTM D2846 or ASTM F493. Solvent cement joints shall be permitted above ground or below ground.

~~120.~~ 102. Change Sections P2910.1 through P2910.14, including subsections, to read:

P2910.1 Scope. The provisions of this section shall govern the materials, design, construction, and installation of nonpotable water systems subject to this code.

P2910.1.1 Design of nonpotable water systems. All portions of nonpotable water systems subject to this code shall be constructed using the same standards and requirements for the potable water systems or drainage systems as provided for in this code unless otherwise specified in this section or Section P2911 or P2912, as applicable.

P2910.2 Makeup water. Makeup water shall be provided for all nonpotable water supply systems. The makeup water system shall be designed and installed to provide supply of water in the amounts and at the pressures specified in this code. The makeup water supply shall be potable and be protected against backflow in accordance with the applicable requirements of Section P2902.

P2910.2.1 Makeup water sources. Nonpotable water shall be permitted to serve as makeup water for gray water and rainwater systems.

P2910.2.2 Makeup water supply valve. A full-open valve shall be provided on the makeup water supply line.

P2910.2.3 Control valve alarm. Makeup water systems shall be fitted with a warning mechanism that alerts the user to a failure of the inlet control valve to close correctly. The alarm shall activate before the water within the storage tank begins to discharge into the overflow system.

P2910.3 Sizing. Nonpotable water distribution systems shall be designed and sized for peak demand in accordance with approved engineering practice methods that comply with the applicable provisions of this chapter.

P2910.4 Signage required. All nonpotable water outlets, other than water closets and urinals, such as hose connections, open ended pipes, and faucets shall be identified at the point of use for each outlet with signage that reads as follows: "Nonpotable water is utilized for (insert application name). Caution: nonpotable water. DO NOT DRINK." The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and in colors in contrast to the background on which they are applied. The pictograph shown in Figure P2910.4 shall appear on the signage required by this section.



Figure P2910.4
Pictograph DO NOT DRINK

P2910.5 Potable water supply system connections. Where a potable water supply system is connected to a nonpotable water system, the potable water supply shall be protected against backflow in accordance with the applicable provisions of Section P2902.

P2910.6 Nonpotable water system connections. Where a nonpotable water system is connected and supplies water to another nonpotable water system, the nonpotable water system that supplies water shall be protected against backflow in accordance with the applicable provisions of Section P2902.

P2910.7 Approved components and materials. Piping, plumbing components, and materials used in the nonpotable water drainage and distribution systems shall be approved for the intended application and compatible with the water and any disinfection or treatment systems used.

P2910.8 Insect and vermin control. Nonpotable water systems shall be protected to prevent the entrance of insects and vermin into storage and piping systems. Screen materials shall be compatible with system material and shall not promote corrosion of system components.

P2910.9 Freeze protection. Nonpotable water systems shall be protected from freezing in accordance with the applicable provisions of Chapter 26.

P2910.10 Nonpotable water storage tanks. Nonpotable water storage tanks shall be approved for the intended application and comply with Sections P2910.10.1 through P2910.10.12.

P2910.10.1 Sizing. The holding capacity of storage tanks shall be sized for the intended use.

P2910.10.2 Inlets. Storage tank inlets shall be designed to introduce water into the tank and avoid agitating the contents of the storage tank. The water supply to storage tanks shall be controlled by fill valves or other automatic supply valves designed to stop the flow of incoming water before the tank contents reach the overflow pipes.

P2910.10.3 Outlets. Outlets shall be located at least ~~4~~ four inches (102 mm) above the bottom of the storage tank and shall not skim water from the surface.

P2910.10.4 Materials and location. Storage tanks shall be constructed of material compatible with treatment systems used to treat water. Above grade storage vessels shall be constructed using opaque, UV-resistant materials, such as tinted plastic, lined metal, concrete, or wood or painted to prevent algae growth. Above grade storage tanks shall be protected from direct sunlight unless their design specifically incorporates the use of the sunlight heat transfer. Wooden storage tanks shall be provided with a flexible liner. Storage tanks and their manholes shall not be located directly under soil or waste piping or sources of contamination.

P2910.10.5 Foundation and supports. Storage tanks shall be supported on a firm base capable of withstanding the storage tank's weight when filled to capacity. Storage tanks shall be supported in accordance with the applicable provisions of the IBC.

P2910.10.5.1 Ballast. Where the soil can become saturated, an underground storage tank shall be ballasted~~,~~ or otherwise secured~~,~~ to prevent the effects of buoyancy. The combined weight of the tank and hold down ballast shall meet or exceed the buoyancy force of the tank. Where the installation requires a foundation, the foundation shall be flat and shall be designed to support the storage tank weight when full, consistent with the bearing capability of adjacent soil.

P2910.10.5.2 Structural support. Where installed below grade, storage tank installations shall be designed to withstand earth and surface structural loads without damage.

P2910.10.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table P2910.10.6. The overflow outlet shall discharge at a point not less than ~~6~~ six inches (152 mm) above the roof or roof drain, floor or floor drain, or over an open water-supplied fixture. The overflow outlet shall terminate through a check valve. Overflow pipes shall not be directed on walkways. The overflow drain shall not be equipped with a shutoff valve. A minimum of one cleanout shall be provided on each overflow pipe in accordance with the applicable provisions of Section P3005.2.

Table P2910.10.6
Sizes for Overflow Pipes for Water Supply Tanks

Maximum Capacity of Water Supply Line to Tank (gpm)	Diameter of Overflow Pipe (inches)
0 - 50	2
50 - 150	2-1/2
150 - 200	3
200 - 400	4
400 - 700	5
700 - 1,000	6
Over 1,000	8

For SI: 1 inch = 25.4 mm, 1 gallon per minute = 3.785 L/m.

P2910.10.7 Access. A minimum of one access opening shall be provided to allow inspection and cleaning of the tank interior. Access openings shall have an approved locking device or other approved method of securing access. Below grade storage tanks, located outside of the building, shall be provided with either a manhole not less than 24 inches (610 mm) square or a manhole with an inside diameter not less than 24 inches (610 mm). The design and installation of access openings shall prohibit surface water from entering the tank. Each manhole cover shall have an approved locking device or other approved method of securing access.

Exception: Storage tanks under 800 gallons (3028 L) in volume installed below grade shall not be required to be equipped with a manhole~~,~~ but shall have an access opening not less than ~~8~~ eight inches (203 mm) in diameter to allow inspection and cleaning of the tank interior.

P2910.10.8 Venting. Storage tanks shall be vented. Vents shall not be connected to the sanitary drainage system. Vents shall be at least equal in size to the internal diameter of the drainage inlet pipe or pipes connected to the tank. Where installed at grade, vents shall be protected from contamination by means of a U-bend installed with the opening directed downward. Vent outlets shall extend a minimum of 12 inches (304.8 mm) above grade~~,~~ or as necessary to prevent surface water from entering the storage tank. Vent openings shall be protected against the entrance of vermin and insects. Vents serving gray water tanks shall terminate in accordance with the applicable provisions of Sections P3103 and P2910.8.

P2910.10.9 Drain. Where drains are provided, they shall be located at the lowest point of the storage tank. The tank drain pipe shall discharge as required for overflow pipes and shall not be smaller in size than specified in Table P2910.10.6. A minimum of one cleanout shall be provided on each drain pipe in accordance with Section P3005.2.

P2910.10.10 Labeling and signage. Each nonpotable water storage tank shall be labeled with its rated capacity and the location of the upstream bypass valve. Underground and otherwise concealed storage tanks shall be labeled at all access points. The label shall read: "CAUTION: NONPOTABLE WATER - DO NOT DRINK." Where an opening is provided that could allow the entry of personnel, the opening shall be marked with the words: "DANGER - CONFINED SPACE." Markings shall be indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material mounted on the tank or shall be indelibly printed on the tank. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and shall be of a color in contrast with the background on which they are applied.

P2910.10.11 Storage tank tests. Storage tanks shall be tested in accordance with the following:

1. Storage tanks shall be filled with water to the overflow line prior to and during inspection. All seams and joints shall be left exposed and the tank shall remain water tight without leakage for a period of 24 hours.

2. After 24 hours, supplemental water shall be introduced for a period of 15 minutes to verify proper drainage of the overflow system and verify that there are no leaks.

3. Following a successful test of the overflow system, the water level in the tank shall be reduced to a level that is at ~~2~~ two inches (50.8 mm) below the makeup water offset point. The tank drain shall be observed for proper operation. The makeup water system shall be observed for proper operation, and successful automatic shutoff of the system at the refill threshold shall be verified. Water shall not be drained from the overflow at any time during the refill test.

4. Air tests shall be permitted in lieu of water testing as recommended by the tank manufacturer or the tank standard.

P2910.10.12 Structural strength. Storage tanks shall meet the applicable structural strength requirements of the IBC.

P2910.11 Trenching requirements for nonpotable water system piping. Underground nonpotable water system piping shall be horizontally separated from the building sewer and potable water piping by ~~5~~ five feet (1524 mm) of undisturbed or compacted earth. Nonpotable water system piping shall not be located in, under, or above sewage systems cesspools, septic tanks, septic tank drainage fields, or seepage pits. Buried nonpotable water system piping shall comply with the requirements of this code for the piping material installed.

Exceptions:

1. The required separation distance shall not apply where the bottom of the nonpotable water pipe within ~~5~~ five feet (1524 mm) of the sewer is equal to or greater than 12 inches (305 mm) above the top of the highest point of the sewer and the pipe materials ~~conforms~~ conform to Table P3002.2.

2. The required separation distance shall not apply where the bottom of the potable water service pipe within ~~5~~ five feet (1524 mm) of the nonpotable water pipe is a minimum of 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table P2906.5.

3. Nonpotable water pipe is permitted to be located in the same trench with building sewer piping, provided that such sewer piping is constructed of materials that comply with the requirements of Table P3002.1(2).

4. The required separation distance shall not apply where a nonpotable water pipe crosses a sewer pipe, provided that the pipe is sleeved to at least ~~5~~ five feet (1524 mm) horizontally from the sewer pipe centerline on both sides of such crossing with pipe materials that comply with Table P3002.1(2).

5. The required separation distance shall not apply where a potable water service pipe crosses a nonpotable water pipe provided that the potable water service pipe is sleeved for a distance of at least ~~5~~ five feet (1524 mm) horizontally from the centerline of the nonpotable pipe on both sides of such crossing with pipe materials that comply with Table P3002.1(2).

P2910.12 Outdoor outlet access. Sillcocks, hose bibs, wall hydrants, yard hydrants, and other outdoor outlets that are supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.

P2910.13 Drainage and vent piping and fittings. Nonpotable drainage and vent pipe and fittings shall comply with the applicable material standards and installation requirements in accordance with provisions of Chapter 30.

P2910.13.1 Labeling and marking. Identification of nonpotable drainage and vent piping shall not be required.

P2910.14 Pumping and control system. Mechanical equipment, including pumps, valves, and filters, shall be accessible and removable in order to perform repair, maintenance, and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be designed for the intended application in accordance with the applicable provisions of Section P2903.

~~121.~~ 103. Add Sections P2910.15 through P2910.18, including subsections, to read:

P2910.15 Water-pressure reducing valve or regulator. Where the water pressure supplied by the pumping system exceeds 80 psi (552 kPa) static, a pressure-reducing valve shall be installed to reduce the pressure in the nonpotable water distribution system piping to 80 psi (552 kPa) static or less. Pressure-reducing valves shall be specified and installed in accordance with the applicable provisions of Section P2903.3.1.

P2910.16 Distribution pipe. Distribution piping utilized in nonpotable water ~~stems~~ systems shall comply with Sections P2910.16.1 through P2910.16.4.

P2910.16.1 Materials, joints, and connections. Distribution piping and fittings shall comply with the applicable material standards and installation requirements in accordance with applicable provisions of Chapter 29.

P2910.16.2 Design. Distribution piping shall be designed and sized in accordance with the applicable provisions of Chapter 29.

P2910.16.3 Labeling and marking. Distribution piping labeling and marking shall comply with Section P2901.2.

P2910.16.4 Backflow prevention. Backflow preventers shall be installed in accordance with the applicable provisions of Section P2902.

P2910.17 Tests and inspections. Tests and inspections shall be performed in accordance with Sections P2910.17.1 through P2910.17.5.

P2910.17.1 Drainage and vent pipe test. Drain, waste, and vent piping used for gray water and rainwater nonpotable

water systems shall be tested in accordance with the applicable provisions of Section P2503.

P2910.17.2 Storage tank test. Storage tanks shall be tested in accordance with the Section P2910.10.11.

P2910.17.3 Water supply system test. Nonpotable distribution piping shall be tested in accordance with Section P2503.7.

P2910.17.4 Inspection and testing of backflow prevention assemblies. The testing of backflow preventers and backwater valves shall be conducted in accordance with Section P2503.8.

P2910.17.5 Inspection of vermin and insect protection. Inlets and vent terminations shall be visually inspected to verify that each termination is installed in accordance with Section P2910.10.8.

P2910.18 Operation and maintenance manuals. Operations and maintenance materials for nonpotable water systems shall be provided as prescribed by the system component manufacturers and supplied to the owner to be kept in a readily accessible location.

~~122.~~ 104. Change the title of Section P2911 to "Gray Water Nonpotable Water Systems."

~~123.~~ 105. Change Sections P2911.1 through P2911.6, including subsections, to read:

P2911.1 Gray water nonpotable water systems. This code is applicable to the plumbing fixtures, piping or piping systems, storage tanks, drains, appurtenances, and appliances that are part of the distribution system for gray water within buildings and to storage tanks and associated piping that are part of the distribution system for gray water outside of buildings. This code does not regulate equipment used for, or the methods of, processing, filtering, or treating gray water, which may be regulated by the Virginia Department of Health or the Virginia Department of Environmental Quality.

P2911.1.1 Separate systems. Gray water nonpotable water systems, unless approved otherwise under the permit from the Virginia Department of Health, shall be separate from the potable water system of a building with no cross connections between the two systems except as permitted by the Virginia Department of Health.

P2911.2 Water quality. Each application of gray water reuse shall meet the minimum water quality requirements set forth in Sections P2911.2.1 through P2911.2.4 unless otherwise superseded by other state agencies.

P2911.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection ~~or~~, other treatment, or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

P2911.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than ~~4~~ four parts per million (4 mg/L) of free chlorine, combined chlorine, or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

P2911.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.

P2911.2.4 Filtration required. Gray water utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

P2911.3 Storage tanks. Storage tanks utilized in gray water nonpotable water systems shall comply with Section P2910.10.

P2911.4 Retention time limits. Untreated gray water shall be retained in storage tanks for a maximum of 24 hours.

P2911.5 Tank location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table P2911.5.1.

Table P2911.5.1
Location of Nonpotable Gray Water Reuse Storage Tanks

Element	Minimum Horizontal Distance from Storage Tank (feet)
Lot line adjoining private lots	5
Sewage systems	5
Septic tanks	5
Water wells	50
Streams and lakes	50
Water service	5
Public water main	10

P2911.6 Valves. Valves shall be supplied on gray water nonpotable water drainage systems in accordance with Sections P2911.6.1 and P2911.6.2.

P2911.6.1 Bypass valve. One three-way diverter valve certified to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank~~,~~ or drainfield, as applicable, to divert untreated gray water to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be labeled to indicate the direction of flow, connection, and storage tank or drainfield connection.

Bypass valves shall be provided with access for operation and maintenance. Two shutoff valves shall not be installed to serve as a bypass valve.

P2911.6.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section P3008.

~~124.~~ 106. Delete Sections P2911.7 through P2911.13, including subsections.

~~125.~~ 107. Change the title of Section P2912 to "Rainwater Nonpotable Water Systems."

~~126.~~ 108. Change Sections P2912.1 through P2912.10, including subsections, to read:

P2912.1 General. The provisions of this section shall govern the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications. The provisions of CSA B805/ICC 805 shall be permitted as an alternative to the provisions contained in this section for the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications. Roof runoff or stormwater runoff collection surfaces shall be limited to roofing materials, public pedestrian accessible roofs, and subsurface collection identified in CSA B805/ICC 805 Table 7.1. Stormwater runoff shall not be collected from any other surfaces.

P2912.2 Water quality. Each application of rainwater reuse shall meet the minimum water quality requirements set forth in Sections P2912.2.1 through P2912.2.4 unless otherwise superseded by other state agencies.

P2912.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

P2912.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 parts per million (4 mg/L) of free chlorine, combined chlorine, or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

P2912.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.

P2912.2.4 Filtration required. Rainwater utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

P2912.3 Collection surface. Rainwater shall be collected only from aboveground impervious roofing surfaces constructed from approved materials. Overflow or discharge piping from appliances ~~or~~, equipment, or both, including evaporative coolers, water heaters, and solar water heaters shall not discharge onto rainwater collection surfaces.

P2912.4 Collection surface diversion. At a minimum, the first 0.04 inches (1.016 mm) of each rain event of 25 gallons (94.6 L) per 1,000 square feet (92.9 m^2) shall be diverted from the storage tank by automatic means and not require the operation of manually operated valves or devices. Diverted water shall not drain onto other collection surfaces that are discharging to the rainwater system or to the sanitary sewer. Such water shall be diverted from the storage tank and discharged in an approved location.

P2912.5 Pre-tank filtration. Downspouts, conductors, and leaders shall be connected to a pre-tank filtration device. The filtration device shall not permit materials larger than 0.015 inches (0.4 mm).

P2912.6 Roof gutters and downspouts. Gutters and downspouts shall be constructed of materials that are compatible with the collection surface and the rainwater quality for the desired end use. Joints shall be made watertight.

P2912.6.1 Slope. Roof gutters, leaders, and rainwater collection piping shall slope continuously toward collection inlets. Gutters and downspouts shall have a slope of not less than ~~1~~ one unit in 96 units along their entire length~~,~~ and shall not permit the collection or pooling of water at any point.

P2912.6.2 Size. Gutters and downspouts shall be installed and sized in accordance with local rainfall rates.

P2912.6.3 Cleanouts. Cleanouts or other approved openings shall be provided to permit access to all filters, flushes, pipes, and downspouts.

P2912.7 Storage tanks. Storage tanks utilized in rainwater nonpotable water systems shall comply with Section P2910.10.

P2912.8 Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table P2912.8.1.

Table P2912.8.1 Location of Rainwater Storage Tanks	
Element	Minimum Horizontal Distance from Storage Tank (feet)
Lot line adjoining private lots	5
Sewage systems	5
Septic tanks	5

P2912.9 Valves. Valves shall be installed in collection and conveyance drainage piping of rainwater nonpotable water systems in accordance with Sections P2912.9.1 and P2912.9.2.

P2912.9.1 Influent diversion. A means shall be provided to divert storage tank influent to allow maintenance and repair of the storage tank system.

P2912.9.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section P3008.

P2912.10 Tests and inspections. Tests and inspections shall be performed in accordance with Sections P2912.10.1 and P2912.10.2.

P2912.10.1 Roof gutter inspection and test. Roof gutters shall be inspected to verify that the installation and slope is in accordance with Section P2912.6.1. Gutters shall be tested by pouring a minimum of one gallon of water into the end of the gutter opposite the collection point. The gutter being tested shall not leak and shall not retain standing water.

P2912.10.2 Collection surface diversion test. A collection surface diversion test shall be performed by introducing water into the gutters or onto the collection surface area. Diversion of the first quantity of water in accordance with the requirements of Section P2912.4 shall be verified.

~~127.~~ 109. Delete Sections P2912.11 through P2912.16, including subsections.

~~128.~~ 110. Delete Section P2913 in its entirety.

~~129.~~ 111. Add Section P3002.2.2 to read:

P3002.2.2 Tracer wire. Nonmetallic sanitary sewer piping that discharges to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product~~,~~ shall be utilized. The wire shall be installed in the same trench as the sewer within 12 inches (305 mm) of the pipe and shall be installed from within five feet of the building wall to the point where the building sewer intersects with the public system. At a minimum, one end of the wire shall terminate above grade in an accessible location that is resistant to physical damage, such as with a cleanout or at the building wall.

~~130. Add Section P3012 Relining Building Sewers and Building Drains.~~

~~131. Add Sections P3012.1 through P3012.10 to read:~~

~~P3012.1 General. This section shall govern the relining of existing building sewers and building drainage piping.~~

~~P3012.2 Applicability. The relining of existing building sewer and building drainage piping shall be limited to gravity drainage piping that is 4 inches (102 mm) in diameter and larger. The relined piping shall be of the same nominal size as the existing piping.~~

~~P3012.3 Pre-installation requirements. Prior to commencement of the relining installation, the existing piping sections to be relined shall be descaled and cleaned. After the cleaning process has occurred and water has been flushed through the system, the piping shall be inspected internally by a recorded video camera survey.~~

~~P3012.3.1 Pre-installation recorded video camera survey. The video survey shall include verification of the project address location. The video shall include notations of the cleanout and fitting locations, and the approximate depth of the existing piping. The video shall also include notations of the length of piping at intervals no greater than 25 feet.~~

~~P3012.4 Permitting. Prior to permit issuance, the code official shall review and evaluate the pre-installment recorded video camera survey to determine if the piping system is capable to be relined in accordance with the proposed lining system manufacturer's installation requirements and applicable referenced standards.~~

~~P3012.5 Prohibited applications. Where review of the pre-installation recorded video camera survey reviews that piping systems are not installed correctly or defects exist, relining shall not be permitted. The defective portions of piping shall be exposed and repaired with pipe and fittings in accordance with this code. Defects shall include backgrade or insufficient slope, complete pipe wall deterioration, or complete separations such as from tree root invasion or improper support.~~

~~P3012.6 Relining materials. The relining materials shall be manufactured in compliance with applicable standards and certified as required in Section 303. Fold and form pipe reline materials shall be manufactured in compliance with ASTM F1504 or ASTM F1871.~~

~~P3012.7 Installation. The installation of relining materials shall be performed in accordance with the manufacturer's installation instructions, applicable referenced standards, and this code.~~

~~P3012.7.1 Material data report. The installer shall record the data as required by the relining material manufacture and applicable standards. The recorded data shall include the location of the project, relining material type, amount of product installed, and conditions of the installation. A copy of the data report shall be provided to the code official prior to final approval.~~

~~P3012.8 Post installation recorded video camera survey. The completed relined piping system shall be inspected internally by a recorded video camera survey after the system has been flushed and flow tested with water. The video survey shall be submitted to the code official prior to finalization of the permit. The video survey shall be reviewed and evaluated to provide verification that no defects exist. Any defects identified shall be repaired and replaced in accordance with this code.~~

~~P3012.9 Certification. A certification shall be provided in writing to the code official, from the permit holder, that the relining materials have been installed in accordance with the manufacturer's installation instructions, the applicable standards and this code.~~

~~P3012.10 Approval. Upon verification of compliance with the requirements of Sections P3011.1 through P3011.9, the code official shall approve the installation.~~

~~132.~~ 112. Add an exception to Section P3301.1 to read:

Exception: Rainwater nonpotable water systems shall be permitted in accordance with the applicable provisions of Sections P2910 and P2912.

~~133.~~ 113. Delete the exception for Section P3003.9.2.

~~134.~~ 114. Add Section ~~E3601.8~~ E3601.9 to read:

~~E3601.8~~ E3601.9 Energizing service equipment. The building official shall give permission to energize the electrical service equipment of a one-family or two-family dwelling unit when all of the following requirements have been approved:

1. The service wiring and equipment, including the meter socket enclosure, shall be installed and the service wiring terminated.

2. The grounding electrode system shall be installed and terminated.

3. At least one receptacle outlet on a ground fault protected circuit shall be installed and the circuit wiring terminated.

4. Service equipment covers shall be installed.

5. The building roof covering shall be installed.

6. Temporary electrical service equipment shall be suitable for wet locations unless the interior is dry and protected from the weather.

~~135.~~ 115. Change Section E3802.4 to read:

E3802.4 In unfinished basements. Where Type SE or Type NM cable is run at angles with joists in unfinished basements, cable assemblies containing two or more conductors of sizes ~~6~~ six AWG and larger and assemblies containing three or more conductors of sizes ~~8~~ eight AWG and larger shall not require additional protection where attached directly to the bottom of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. Type NM or Type SE cable installed on the wall of an unfinished basement shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with Table E3802.1. Conduit or tubing shall be provided with a suitable insulating bushing or adapter at the point ~~the~~ where cable enters the raceway. The sheath of the Type NM or Type SE cable shall extend through the conduit or tubing and into the outlet or device box not less than 1/4 inch (6.4 mm). The cable shall be secured within 12 inches (305 mm) of the point where the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to an equipment grounding conductor complying with Section E3908.13.

~~136. Change~~ 116. Delete Section E3902.17.

117. Add Exception 2 to Section ~~E3902.16~~ E3902.20 to read:

~~E3902.16 Arc fault circuit interrupter protection. Branch circuits that supply 120 volt, single phase, 15 ampere and 20 ampere outlets installed in kitchens, family rooms, dining rooms, living rooms, parlors, libraries dens, bedrooms, sunrooms, recreation rooms, closets, hallways, laundry areas, and similar rooms or areas shall be protected by any of the following:~~

~~1. A listed combination type arc fault circuit interrupter installed to provide protection of the entire branch circuit.~~

~~2. A listed branch/feeder type AFCI installed at the origin of the branch circuit in combination with a listed outlet branch circuit type arc fault circuit interrupter installed at the first outlet box on the branch circuit. The first outlet box in the branch circuit shall be marked to indicate that it is the first outlet of the circuit.~~

~~3. A listed supplemental arc protection circuit breaker installed at the origin of the branch circuit in combination with a listed outlet branch circuit type arc fault circuit interrupter installed at the first outlet box on the branch circuit where all of the following conditions are met:~~

~~3.1. The branch circuit wiring shall be continuous from the branch circuit overcurrent device to the outlet branch circuit arc fault circuit interrupter.~~

~~3.2. The maximum length of the branch circuit wiring from the branch circuit overcurrent device to the first outlet shall not exceed 50 feet (15.2 m) for 14 AWG conductors and 70 feet (21.3 m) for 12 AWG conductors.~~

~~3.3. The first outlet box on the branch circuit shall be marked to indicate that it is the first outlet on the circuit.~~

4. A listed outlet branch-circuit type arc-fault circuit interrupter installed at the first outlet on the branch circuit in combination with a listed branch circuit overcurrent protective device where all of the following conditions are met:

4.1. The branch circuit wiring shall be continuous from the branch circuit overcurrent device to the outlet branch circuit arc fault circuit interrupter.

4.2. The maximum length of the branch circuit wiring from the branch circuit overcurrent device to the first outlet shall not exceed 50 feet (15.2 m) for 14 AWG conductors and 70 feet (21.3 m) for 12 AWG conductors.

4.3. The first outlet box on the branch circuit shall be marked to indicate that it is the first outlet on the circuit.

4.4. The combination of the branch circuit overcurrent device and outlet branch circuit AFCI shall be identified as meeting the requirements for a system combination type AFCI and shall be listed as such.

5. Where metal outlet boxes and junction boxes and RMC, IMC, EMT, Type MC or steel armored Type AC cables meeting the requirements of Section E3908.8, metal wireways or metal auxiliary gutters are installed for the portion of the branch circuit between the branch circuit overcurrent device and the first outlet, a listed branch circuit type AFCI installed at the first outlet shall be considered as providing protection for the remaining portion of the branch circuit.

6. Where a listed metal or nonmetallic conduit or tubing or Type MC cable is encased in not less than two inches (50.8 mm) of concrete for the portion of the branch circuit between the branch circuit overcurrent device and the first outlet, a listed outlet branch circuit type AFCI installed at the first outlet shall be considered as providing protection for the remaining portion of the branch circuit.

Exceptions:

1. AFCI protection is not required for an individual branch circuit supplying only a fire alarm system where the branch circuit is wired with metal outlet and junction boxes and RMC, IMC, EMT or steel sheathed armored cable Type AC, or Type MC meeting the requirements of Section E3908.8.

2. AFCI protection is not required where GFCI protection is required in accordance with E3902 and NEC 210.8(A)

137. Change 118. Add the following standards to the list of referenced standards in Chapter 44 as follows (standards not shown remain the same):

Standard Reference Number	Title	Referenced in Code Section Number
ANSI LC1/CSA 6.26-18	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)	G2411.1, G2411.1.1, G2414.5.3
ASTM F1504-14	Standard Specification for Folded/Formed Poly (Vinyl Chloride) (PVC) for Existing Sewer and Conduit Rehabilitation	P3012.4, P3012.6
ASTM F1871-11	Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation	P3012.4, P3012.6
CSA B805-18/ICC 805-18	Rainwater Harvesting Systems	P2912.1
NFPA 13 – 16 13-19	Standard for Installation of Sprinkler Systems	R302.2.6
NFPA 13D – 16	Standard for the Installation of Sprinkler Systems in one- and Two-family Dwellings and Manufactured Homes	R302.2.6, R302.13, R325.5, P2904.1, P2904.6.1
NFPA 13R – 16 13R-19	Standard for the Installation of Sprinkler Systems in Low Rise Residential Occupancies	R302.2.6, R302.3, R325.5
UL 474-2015	Standard for Safety Dehumidifiers	
UL 484-2019	Standard for Room Air Conditioners	
UL60335-2-40-2019//CAN/CSA C22.2 No. 60335-2-40-19	Standard for Household and Similar Electrical Appliances, Safety Part 2 -40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers	

119. Delete the following standards from the list of referenced standards in Chapter 44:

Standard Reference Number	Title
UL/CSA/ANCE 60335-2-40—2012	Safety of Household and Similar Electric Appliances, Part 2-40: Particular Requirements for Heat Pumps, Air-Conditioners and Dehumidifiers
NMX-J-521/2-40-ANCE—2014/CAN/CSA-22.2 No. 60335-2-40—12/UL 60335-2-40	Safety of Household and Similar Electric Appliances, Part 2-40: Particular Requirements for Heat Pumps, Air-Conditioners and Dehumidifiers

~~138. Change Section AQ104.1.2 to read:~~

~~AQ104.1.2 Minimum horizontal dimensions. Lofts shall be not less than 5 feet (1524 mm) in any horizontal dimension.~~

~~139. Change the exception to Section AQ104.1.3 to read:~~

~~Exception: Under gable roofs with a minimum slope of 6 units vertical in 12 units horizontal (50% slope), portions of a loft with a sloped ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft. See Figure AQ104.1.3.~~

~~140. Add Figure AQ104.1.3 Loft Ceiling Height.~~

EDITOR'S NOTE: Figure AQ104.1.3, Loft Ceiling Height, is deleted; therefore the figure is not set out.

~~141. Change Sections AQ104.2, AQ104.2.1, and AQ 104.2.1.2 to read:~~

~~AQ104.2 Loft access and egress. The access to and primary egress from lofts shall be of any type described in Sections AQ104.2.1 through AQ104.2.4. The loft access and egress element along its required minimum width shall meet the loft where its ceiling height is not less than 3 feet (914 mm).~~

~~AQ104.2.1 Stairways. Stairways accessing lofts shall comply with this code or with Sections AQ104.2.1.1 through AQ104.2.1.7.~~

~~AQ104.2.1.2 Headroom. The headroom above stairways accessing a loft shall be not less than 6 feet 2 inches (1880 mm), as measured vertically, from a sloped line connecting the tread, landing, or landing platform nosings in the center of their width, and vertically from the landing platform along the center of its width.~~

~~142. Change Sections AQ104.2.1.4 through AQ104.2.1.6 to read:~~

~~AQ104.2.1.4 Landings. Intermediate landings and landings at the bottom of stairways shall comply with Section R311.7.6, except that the depth in direction of travel shall be not less than 24 inches (610 mm).~~

~~AQ104.2.1.5 Landing platforms. The top tread and riser of stairways accessing lofts shall be constructed as a landing platform where the loft ceiling height is less than 6 feet 2 inches (1880 mm) where the stairway meets the loft. The landing platform shall be not less than 20 inches (508 mm) in width and in depth measured horizontally from and perpendicular to the nosing of the landing platform. The landing platform riser height to the loft floor shall be not less than 16 inches (406 mm) and not greater than 18 inches (457 mm).~~

~~AQ104.2.1.6 Handrails. Handrails shall comply with Section R311.7.8.~~

~~143. Add Section AQ104.2.1.7 to read:~~

~~AQ104.2.1.7 Stairway guards. Guards at open sides of stairways, landings, and landing platforms shall comply with Section R312.1.~~

~~144. Change Sections AQ 104.2.2.1 and AQ104.2.5 to read:~~

~~AQ104.2.2.1 Size and capacity. Ladders accessing lofts shall have a rung width of not less than 12 inches (305 mm), with 10 inch (254 mm) to 14 inch (356 mm) spacing between rungs. Ladders shall be capable of supporting a 300 pound (136 kg) load on any rung. Rung spacing shall be uniform within 3/8 inch (9.5 mm).~~

~~AQ104.2.5 Loft Guards. Loft guards shall be located along the open side of lofts. Loft guards shall be not less than 36 inches (914 mm) in height or one half of the clear height to the ceiling, whichever is less. Loft guards shall comply with Section R312.1.3 and Table R301.5 for their components.~~

S. Add "Marinas" to the list of occupancies in Section 312.1 of the IBC.

T. Add Section 313 State regulated care facilities (SRCF) to the IBC to read:

313.1 General. Notwithstanding any other requirements of this code, this section applies to the use and occupancy classification of state regulated care facilities addressed in this section.

313.2 Assisted living facilities. Assisted living facilities licensed by the Virginia Department of Social Services shall be classified as one of the occupancies specified in Sections 313.2.1 through 313.2.6.

313.2.1 Group I-1 Condition 1. Facilities with more than 16 persons receiving care, in which all persons receiving care, without any assistance, are capable of responding to an emergency situation to complete building evacuation, shall be classified as Group I-1 Condition 1. Not more than five of the persons may require physical assistance from staff to respond to an emergency, provided all persons requiring

assistance reside on a level of exit discharge and the path of egress to the exit does not include steps.

313.2.2 Group I-1 Condition 2. Facilities with more than 16 persons receiving care, in which there are persons who require assistance by not more than one staff member while responding to an emergency situation to complete building evacuation, shall be classified as Group I-1 Condition 2. Not more than five of the persons may require physical assistance from more than one staff member to respond to an emergency situation.

313.2.3 Group I-2 Condition 1. Facilities with more than five persons receiving care who require assistance by more than one staff member when responding to an emergency situation to complete building evacuation, shall be classified as Group I-2 Condition 1.

313.2.4 Group R-4 Condition 1. Facilities with nine to 16 persons receiving care, where all persons receiving care, without any assistance, are capable of responding to an emergency situation to complete building evacuation shall be classified as R-4 Condition 1. Not more than five of the persons may require physical assistance from staff to respond to an emergency, provided all persons requiring assistance reside on a level of exit discharge and the path of egress to the exit does not include steps.

313.2.5 Group R-4 Condition 2. Buildings with nine to 16 persons receiving care, who may require assistance by not more than one staff member when responding to an emergency situation to complete building evacuation, shall be classified as Group R-4 Condition 2. Not more than five of the persons may require physical assistance from staff to respond to an emergency situation.

313.2.6 Group R-2, R-3, or R-5. Facilities with no more than eight persons receiving care, with one or more resident counselors, and all persons are capable of ~~respond~~ responding to an emergency situation without physical assistance from staff, may be classified as Group R-2, R-3, or R-5. Up to five of the persons may require physical assistance from staff to respond to an emergency situation when in compliance with the following:

1. All residents that require physical assistance from staff reside on a level of exit discharge and the path of egress to the exit does not include steps.

2. The building is protected by an automatic sprinkler system installed in accordance with Section 903.3 or Section P2904 of the IRC.

313.3 Family day homes. Family day homes registered or licensed by the Virginia Department of ~~Social Services~~ Education shall be classified as Group R-2, R-3, or R-5.

313.4 Group homes. Group Homes licensed by the Virginia Department of Behavioral Health and Developmental Services shall be classified as one of the occupancies specified in Sections 313.4.1 through 313.4.3.

313.4.1 Groups R-2, R-3, R-4 Condition 1 or 2, or R-5. Facilities with no more than eight persons receiving care, with one or more resident counselors, shall be classified as Group R-2, R-3, R-4 (Condition 1 or 2), or R-5. Not more than five of the persons may require physical assistance from staff to respond to an emergency situation.

313.4.2 Group R-4 Condition 1. Facilities with eight to 16 persons receiving care, where all persons, without any assistance, are capable of responding to an emergency situation to complete building evacuation shall be classified as Group R-4 Condition 1. Not more than five of the persons may require physical assistance from staff to respond to an emergency, provided all persons requiring assistance reside on a level of exit discharge and the path of egress to the exit does not include steps.

313.4.3 Group R-4 Condition 2. Facilities with eight to 16 persons receiving care or facilities with more than five persons requiring physical assistance from staff to respond to an emergency situation shall be classified as Group R-4 Condition 2.

313.5 Hospice facilities. Hospice facilities licensed by the Virginia Department of Health shall be classified as one of the occupancies specified in Sections 313.5.1 through 313.5.3.

313.5.1 Group I-2. Facilities with 16 or more persons receiving care shall be classified as Group I-2.

313.5.2 Group R-4 Condition 1. Facilities with less than 16 persons receiving care shall be classified as Group R-4 Condition 1.

313.5.3 Group R-5. Facilities with five or fewer persons receiving care are permitted to be classified as Group R-5.

13VAC5-63-220. Chapter 4 Special detailed requirements based on use and occupancy.

A. Delete Section 403.4.5 of the IBC.

B. Change ~~Section~~ Sections 407.4 and 407.4.1.1 of the IBC to read:

407.4 Means of egress. Group I-2 occupancies shall be provided with means of egress complying with Chapter 10 and Sections 407.4.1 through 407.4.4.

407.4.1.1 Special locking arrangement. Means of egress doors shall be permitted to contain locking devices restricting the means of egress in areas in which the clinical needs of the patients require restraint of movement, where all of the following conditions are met:

1. The locks release upon activation of the fire alarm system or the loss of power.

2. The building is equipped with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

3. A manual release device is provided at a nursing station responsible for the area.

4. A key-operated switch or other manual device is provided adjacent to each door equipped with the locking device. Such switch or other device, when operated, shall result in direct interruption of power to the lock — independent of the control system electronics.

5. All staff shall have keys or other means to unlock the switch or other device or each door provided with the locking device.

C. Add Section 407.12 to the IBC to read:

407.12 Emergency power systems. Emergency power shall be provided for medical life support equipment, operating, recovery, intensive care, emergency rooms, fire detection, and alarm systems in any Group I-2 occupancy licensed by the Virginia Department of Health as a hospital, nursing home, or hospice facility.

D. Add Section 408.2.1 to the IBC to read:

408.2.1 Short-term holding areas. Short-term holding areas shall be permitted to comply with Section 431.

E. Change Section 408.6 of the IBC to read:

408.6 Smoke barrier. Occupancies classified as Group I-3 shall have smoke barriers complying with Sections 408.8 and 709 to divide every story occupied by residents for sleeping~~,~~ or any other story having an occupant load of 50 or more persons~~,~~ into no fewer than two smoke compartments.

F. Change Section 408.9 of the IBC and add Sections 408.9.1 through 408.9.3 to the IBC to read:

408.9 Smoke control. Smoke control for each smoke compartment shall be in accordance with Sections 408.9.1 through 408.9.3.

Exception: Smoke compartments with operable windows or windows that are readily breakable.

408.9.1 Locations. An engineered smoke control system shall comply with Section 909 and shall be provided in the following locations:

1. Dormitory areas.

2. Celled areas.

3. General housing areas.

4. Intake areas.

5. Medical celled or medical dormitory areas.

6. Interior recreation areas.

408.9.2 Compliance. The engineered smoke control system shall provide and maintain a tenable environment in the area of origin and shall comply with all of the following:

1. Shall facilitate the timely evacuation and relocation of occupants from the area of origin.

2. Shall be independent of exhaust systems under Chapter 5 of the IMC.

3. Duration of operation in accordance with Section 909.4.6.

4. The pressurization method shall be permitted and shall provide a minimum of 24 air changes per hour of exhaust~~,~~ and 20 air changes per hour of makeup~~,~~ and shall comply with Section 909.6. If the pressurization method is not utilized, the exhaust method shall be provided and shall comply with Section 909.8.

408.9.3 Corridors. Egress corridors within smoke compartments shall be kept free and clear of smoke.

G. Add Section 414.6.2 to the IBC to read:

414.6.2 Other regulations. The installation, repair, upgrade, and closure of underground and aboveground storage tanks subject to the ~~Virginia State Water Control Board regulations~~ Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91) and Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580) shall be governed by those regulations, which are hereby incorporated by reference to be an enforceable part of this code. Where differences occur between the provisions of this code and the incorporated provisions of ~~the State Water Control Board regulations~~ 9VAC25-91 and 9VAC25-580, the provisions of ~~the State Water Control Board regulations~~ 9VAC25-91 and 9VAC25-580 shall apply. Provisions of the International Fire Code addressing closure of such tanks that are subject to ~~the Virginia State Water Control Board regulations~~ 9VAC25-91 and 9VAC25-580 shall not be applicable.

H. Change footnote "b" of Table 428.3 of the IBC to read:

b. Shall include walls, floors, ceilings, and construction supporting the floor of the laboratory suite necessary to provide separation from other portions of the building. Fire barriers shall be constructed in accordance with Section 707, and horizontal assemblies shall be constructed in accordance with Section 711.

I. Delete Section 428.3.3 of the IBC.

J. Change Section 428.3.7 of the IBC to read:

428.3.7 Ventilation. Ventilation shall be in accordance with the Virginia Mechanical Code. The design and installation of ducts from chemical fume hoods shall be in accordance with NFPA 91.

K. Add IBC Section 429 to read:

Section 429 Manufactured Homes and Industrialized Buildings.

429.1 General. The provisions of this section shall apply to the installation or erection of manufactured homes subject to the Virginia Manufactured Home Safety Regulations (13VAC5-95) and industrialized buildings subject to the Virginia Industrialized Building Safety Regulations (13VAC5-91).

Note: Local building departments are also responsible for the enforcement of certain provisions of the Virginia Manufactured Home Safety Regulations (13VAC5-95) and the Virginia Industrialized Building Safety Regulations (13VAC5-91) as set out in those regulations.

429.2 Site work for manufactured homes. Footing design, basements, grading, drainage, decks, stoops, porches, and utility connections shall comply with the provisions of this code applicable to Group R-5 occupancies. Manufactured homes shall be classified as Group R-5 in accordance with Chapter 3 of this code. Additionally, all applicable provisions of Chapter 1 of this code, including requirements for permits, inspections, certificates of occupancy, and requiring compliance, are applicable to the installation and set-up of a manufactured home. Where the installation or erection of a manufactured home utilizes components that are to be concealed, the installer shall notify the building official that an inspection is necessary and ~~assure~~ ensure that an inspection is performed and approved prior to concealment of such components, unless the building official has agreed to an alternative method of verification.

429.2.1 Relocated manufactured homes. Installation, set-up, and site work for relocated manufactured homes shall comply with the provisions of this code and shall include the option of using the manufacturer's installations instructions or the federal Model Manufactured Home Installation Standards (24 CFR Part 3285) for the technical requirements.

429.2.2 Alterations and repairs to manufactured homes. Alterations and repairs to manufactured homes shall either be in accordance with federal Manufactured Home Construction and Safety Standards (24 CFR Part 3280) or in accordance with the alteration and repair provisions of this code.

429.2.3 Additions to manufactured homes. Additions to manufactured homes shall comply with this code and shall be structurally independent of the manufactured home, or when not structurally independent, shall be evaluated by an RDP to determine that the addition does not cause the manufactured home to become out of compliance with federal Manufactured Home Construction and Safety Standards (24 CFR Part 3280).

429.3 Wind load requirements for manufactured homes. Manufactured homes shall be anchored to withstand the wind loads established by the federal regulation for the area in which the manufactured home is installed. For the purpose of this code, Wind Zone II of the federal regulation shall include the ~~cities~~ Cities of Chesapeake, Norfolk, Portsmouth, and Virginia Beach.

429.4 Skirting requirements for manufactured homes. As used in this section, "skirting" means a weather-resistant material used to enclose the space from the bottom of the manufactured home to grade. In accordance with § 36-99.8 of the Code of Virginia, manufactured homes installed or relocated shall have skirting installed within 60 days of occupancy of the home. Skirting materials shall be durable, suitable for exterior exposures and installed in accordance with the manufacturer's installation instructions. Skirting shall be secured as necessary to ensure stability, to minimize vibrations, to minimize susceptibility to wind damage, and to compensate for possible frost heave. Each manufactured home shall have a minimum of one opening in the skirting providing access to any water supply or sewer drain connections under the home. Such openings shall be a minimum of 18 inches (457 mm) in any dimension and not less than three square feet (0.28 m^2) in area. The access panel or door shall not be fastened in a manner requiring the use of a special tool to open or remove the panel or door. On-site fabrication of the skirting by the owner or installer of the home shall be acceptable, provided that the material meets the requirements of this code. In addition, as a requirement of this code, skirting for the installation and set-up of a new manufactured home shall also comply with the requirements of 24 CFR Part 3285 - Model Manufactured Home Installation Standards.

429.5 Site work for industrialized buildings. Site work for the erection and installation of an industrialized building shall comply with the manufacturer's installation instructions. To the extent that any aspect of the erection or installation of an industrialized building is not covered by the manufacturer's installation instructions, this code shall be applicable, including the use of the IRC for any construction work where the industrialized building would be classified as a Group R-5 building. In addition, all administrative requirements of this code for permits, inspections, and certificates of occupancy are also applicable. Further, the building official may require the submission of plans and specifications for details of items needed to comprise the finished building that are not included or specified in the manufacturer's instructions, including footings, foundations, supporting structures, proper anchorage, and the completion of the plumbing, mechanical, and electrical systems. Where the installation or erection of an industrialized building utilizes components that are to be concealed, the installer shall notify the building official that an inspection is necessary and ~~assure~~ ensure that an inspection is performed

and approved prior to concealment of such components, unless the building official has agreed to an alternative method of verification.

Exception: Temporary family health care structures installed pursuant to § 15.2-2292.1 of the Code of Virginia shall not be required or permitted to be placed on a permanent foundation~~,~~ but shall otherwise remain subject to all pertinent provisions of this section.

429.6 Relocated industrialized buildings; alterations and additions. Industrialized buildings constructed prior to January 1, 1972, shall be subject to Section 117 when relocated. Alterations and additions to any existing industrialized buildings shall be subject to pertinent provisions of this code. Building officials shall be permitted to require the submission of plans and specifications for the model to aid in the evaluation of the proposed alteration or addition. Such plans and specifications shall be permitted to be submitted in electronic or other available format acceptable to the building official.

429.7 Change of occupancy of industrialized buildings. Change of occupancy of industrialized buildings is regulated by the Virginia Industrialized Building Safety Regulations (13VAC5-91). When the industrialized building complies with those regulations for the new occupancy, the building official shall issue a new certificate of occupancy under the USBC.

L. Add Section 430 Aboveground Liquid Fertilizer Tanks to the IBC to read:

430.1 General. This section shall apply to the construction of aboveground liquid fertilizer storage tanks (ALFSTs) and shall supersede any conflicting requirements in other provisions of this code. ALFSTs shall also comply with any applicable nonconflicting requirements of this code.

430.1.1 When change of occupancy rules apply. A change of occupancy to use a tank as an ALFST occurs when there is a change in the use of a tank from storing liquids other than liquid fertilizers to a use of storing liquid fertilizer and when the type of liquid fertilizer being stored has a difference of at least 20% of the specific gravity ~~or~~, operating temperature, or both~~,~~ or a significant change in the material's compatibility.

430.2 Standards. Newly constructed welded steel ALFSTs shall comply with API 650 and TFI RMIP, as applicable. Newly constructed ALFSTs constructed of materials other than welded steel shall be constructed in accordance with accepted engineering practice to prevent the discharge of liquid fertilizer and shall be constructed of materials that are resistant to corrosion, puncture, or cracking. In addition, newly constructed ALFSTs constructed of materials other than welded steel shall comply with TFI RMIP, as applicable. For the purposes of this code, the use of TFI RMIP shall be construed as mandatory and any language in TFI RMIP, such as, but not limited to, the terms "should" or "may" which indicate that a provision is only a recommendation or a guideline shall be taken as a requirement. ALFSTs shall be placarded in accordance with NFPA 704.

Exception: Sections 4.1.4, 4.2.5, 5.1.2, 5.2.8, 5.3, and 8.1(d)(i) of TFI RMIP shall not be construed as mandatory.

430.3 Secondary containment. When ALFSTs are newly constructed and when there is a change of occupancy to use a tank as an ALFST, a secondary containment system designed and constructed to prevent any liquid fertilizer from reaching the surface water, groundwater or adjacent land before cleanup occurs shall be provided. The secondary containment system may include dikes, berms or retaining walls, curbing, diversion ponds, holding tanks, sumps, vaults, double-walled tanks, liners external to the tank, or other approved means and shall be capable of holding up to 110% of the capacity of the ALFST as certified by an RDP.

430.4 Repair, alteration and reconstruction of ALFSTs. Repair, alteration and reconstruction of ALFSTs shall comply with applicable provisions of API 653 and TFI RMIP.

430.5 Inspection. Applicable inspections as required by and in accordance with API 653 and TFI RMIP shall be performed for repairs and alterations to ALFSTS, the reconstruction of ALFSTs and when there is a change of occupancy to use a tank as an ALFST. When required by API 653 or TFI RMIP, such inspections shall occur prior to the use of the ALFST.

430.6 Abandoned ALFSTs. Abandoned ALFSTs shall comply with applicable provisions of Section 5704.2.13.2 of the IFC.

M. Add Section 431 Short-term Holding Areas to the IBC to read:

431.1 General. In all groups other than Group E, short-term holding areas shall be permitted to be classified as the main occupancy, provided all of the following are met:

1. Provisions are made for the release of all restrained or detained occupants of short-term holding areas at all times.

2. Aggregate area of short-term holding areas shall not occupy more than 10% of the building area of the story in which they are located and shall not exceed the tabular values for building area in Table 506.2 without building area increases.

3. Restrained or detained occupant load of each short-term holding area shall not exceed 20.

4. Aggregate restrained or detained occupant load in short-term holding areas per building shall not exceed 80.

5. Compliance with Sections 408.3.7, 408.3.8, 408.4, and 408.7 as applicable for Group I-3 occupancies.

6. Requirements of the main occupancy in which short-term holding areas are located shall be met.

7. Fire areas containing short-term holding areas shall be provided with a fire alarm system and automatic smoke detection system complying with Section 907.2.6.3 as applicable to I-3 occupancies.

8. Where each fire area containing short-term holding areas exceeds 12,000 square feet (1115 m^2), such fire areas shall be provided with an automatic sprinkler system complying with Section 903.3.

9. Short-term holding areas shall be separated from other short-term holding areas and adjacent spaces by smoke partitions complying with Section 710.

N. Add Section 432 Plant Processing or Extraction Facilities to the IBC to read:

432.1 General. The design, construction, and installation of plant processing or extraction facilities in any occupancy group shall comply with Chapter 39 of the International Fire Code.

O. Add Section 433 Electrical Energy Storage Systems (ESS) to the IBC to read:

433.1 Scope. Electrical Energy Storage Systems shall comply with the applicable provisions of the International Fire Code.

13VAC5-63-226. ~~Chapter 6 Types of construction.~~ (Repealed.)

~~Add Section 602.1.2 to read:~~

~~602.1.2 Alternative Provisions. As an alternative to the construction types defined in 602.2 through 602.5, buildings and structures erected or to be erected, altered, or extended in height or area may be classified as construction type IV-A, IV-B, or IV-C in accordance with Chapter 6 of the 2021 International Building Code. Buildings and structures classified as IV-A, IV-B, or IV-C shall comply with all provisions of the 2021 International Building Code and 2021 International Fire Code specific to mass timber and the construction type of the building or structure, as well as all other applicable provisions of this code, including provisions for buildings of Type IV construction.~~

13VAC5-63-230. Chapter 7 Fire and smoke protection features.

A. Change ~~item~~ Item 5 of Section ~~703.3~~ 703.2.2 of the IBC to read:

5. Alternative protection methods as allowed by Section 112.2.

B. Change Section ~~703.7~~ 703.5 of the IBC to read:

703.7 Fire-resistance assembly marking. Where there is a concealed floor, floor-ceiling, ~~or~~ attic space, the fire walls, fire barriers, fire partitions, smoke barriers, or any other wall required to have protected openings or penetrations shall be designated above ceilings and on the inside of all ceiling access doors that provide access to such fire rated assemblies by signage having letters no smaller than one inch (25.4 mm) in height. Such signage shall indicate the fire-resistance rating of the assembly and the type of assembly and be provided at horizontal intervals of no more than eight feet (2438 mm).

Note: An example of suggested formatting for the signage would be "ONE HOUR FIRE PARTITION."

C. ~~Change the exception and add an exception~~ Add Exception 2 to Section 705.2 of the IBC to read:

~~Exceptions:~~

~~1. Buildings on the same lot and considered as portions of one building in accordance with Section 705.3 are not required to comply with this section.~~

2. Decks and open porches of buildings of Groups R-3 and R-4.

D. Change Section 706.1 of the IBC to read:

706.1 General. Each portion of a building separated by one or more fire walls shall be considered a separate building. Fire walls shall be constructed in accordance with Sections 706.2 through 706.11. The extent and location of such fire walls shall provide a complete separation. Where a fire wall separates occupancies that are required to be separated by a fire barrier wall, the most restrictive requirements of each separation shall apply. Equipment and systems are permitted to serve multiple attached buildings on the same lot where separated by one or more fire walls.

E. Delete Exception 2 to Section 706.1.1 of the IBC.

~~D.~~ F. Add Exception 4 to Section 706.5.2 of the IBC to read:

4. Decks and open porches of buildings in Groups R-3 and R-4.

~~E.~~ G. Change Section 716.2.1.4 of the IBC to read:

716.2.1.4 Smoke and draft control. Fire door assemblies located in smoke barrier walls shall also meet the requirements for a smoke and draft control door assembly tested in accordance with UL 1784.

~~F.~~ H. Change Section 717.5.3 of the IBC to read:

717.5.3 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

Exceptions:

1. Fire and smoke dampers are not required where steel exhaust subducts extend at least 22 inches (559 mm)

vertically in exhaust shafts, provided there is a continuous airflow upward to the outside.

2. Fire dampers are not required where penetrations are tested in accordance with ASTM E119 as part of the fire resistance-rated assembly.

3. Fire and smoke dampers are not required where ducts are used as part of an approved smoke control system in accordance with Section 909.

4. Fire and smoke dampers are not required where the penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than two-hour fire-resistance-rated construction.

5. Smoke dampers are not required where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

~~G.~~ I. Add Section 717.6.2.2 to the IBC to read:

717.6.2.2 Equipment shutdown. Where ceiling radiation dampers are listed as static dampers, the HVAC equipment shall be effectively shut down to stop the airflow prior to the damper closing using one of the following methods:

1. A duct detector installed in the return duct.

2. An area smoke detector interlocked with the HVAC equipment.

3. A listed heat sensor installed in the return duct.

13VAC5-63-240. Chapter 9 Fire protection systems.

A. Change Item 2 of Section 903.2.1.2 of the IBC to read:

2. The fire area has an occupant load of 100 or more in night clubs or 300 or more in other Group A-2 occupancies.

B. Change Item 2 of Section 903.2.1.3 of the IBC to read:

2. In Group A-3 occupancies other than places of religious worship, the fire area has an occupant load of 300 or more.

C. ~~Change~~ Delete Item 3 and change Item 1 of Section 903.2.3 of the IBC to read:

1. Throughout all Group E fire areas greater than 20,000 square feet (1858 m^2) in area.

D. Add Exception 4 to Section 903.2.6 to read:

4. An automatic sprinkler system shall not be required for open-sided or chain link-sided buildings and overhangs over exercise yards 200 square feet (18.58 m^2) or less in Group I-3 facilities, provided such buildings and overhangs are of noncombustible construction.

E. Delete ~~Item 4 of~~ Section ~~903.2.7~~ 903.2.7.2 of the IBC.

F. Change Section 903.2.8 of the IBC to read:

903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area, except for Group R-2 occupancies listed in the exceptions to this section when the necessary water pressure ~~or,~~ volume, or both~~,~~ for the system is not available:

Exceptions:

1. Group R-2 occupancies that do not exceed two stories, including basements that are not considered as a story above grade, and with a maximum of 16 dwelling units per fire area. Each dwelling unit shall have at least one door opening to an exterior exit access that leads directly to the exits required to serve that dwelling unit.

2. Group R-2 occupancies where all dwelling units are not more than two stories above the lowest level of exit discharge and not more than one story below the highest level of exit discharge of exits serving the dwelling unit and a two-hour fire barrier is provided between each pair of dwelling units. Each bedroom of a dormitory or boarding house shall be considered a dwelling unit under this exception.

G. Add ~~Section 903.3.1.2.3.1~~ Item 5 to Section 903.3.1.2.3 of the IBC to read:

~~903.3.1.2.3.1 Group R-2 Attics.~~ 5. Sprinkler protection shall be provided for attics in buildings of Type III, IV, or V construction in Group R-2 occupancies that are designed or developed and marketed to senior citizens 55 years of age or older and in Group I-1 occupancies in accordance with Section 7.2 of NFPA 13R.

H. Add Section 903.3.5.1.1 to the IBC and change Section 903.3.5.2 of the IBC to Section 903.3.5.1.2; both to read as follows:

903.3.5.1.1 Limited area sprinkler systems. Limited area sprinkler systems serving fewer than 20 sprinklers on any single connection are permitted to be connected to the domestic service where a wet automatic standpipe is not available. Limited area sprinkler systems connected to domestic water supplies shall comply with each of the following requirements:

1. Valves shall not be installed between the domestic water riser control valve and the sprinklers.

Exception: An approved indicating control valve supervised in the open position in accordance with Section 903.4.

2. The domestic service shall be capable of supplying the simultaneous domestic demand and the sprinkler demand required to be hydraulically calculated by NFPA 13, NFPA 13R, or NFPA 13D.

903.3.5.1.2 Residential combination services. A single combination water supply shall be allowed provided that the domestic demand is added to the sprinkler demand as required by NFPA 13R.

I. Delete Sections 903.3.8 through 903.3.8.5 of the IBC.

J. Change Section 903.4.2 of the IBC to read:

903.4.2 Alarms. Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. Group R-2 occupancies that contain 16 or more dwelling units or sleeping units, any dwelling unit or sleeping unit two or more stories above the lowest level of exit discharge, or any dwelling unit or sleeping unit more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit shall provide a manual fire alarm box at an approved location to activate the suppression system alarm.

K. Change Section 905.3.1 of the IBC to read:

905.3.1 Height. Class III standpipe systems shall be installed throughout buildings where four or more stories are above or below grade plane, the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.

Exceptions:

1. Class I standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

2. Class I manual wet standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1 or Section 903.3.2 and where the highest floor is located not more than 150 feet (45,720 mm) above the lowest level of fire department vehicle access.

3. Class I manual standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet (45,720 mm) above the lowest level of fire department vehicle access.

4. Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.

5. Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.

6. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:

6.1. Recessed loading docks for four vehicles or less.

6.2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

L. Change Item 1 of Section 906.1 of the IBC to read:

1. In Groups A, B, E, F, H, I, M, R-1, R-4, and S occupancies.

Exceptions:

1. In Groups A, B, and E occupancies equipped throughout with quick response sprinklers, portable fire extinguishers shall be required only in locations specified in Items 2 through 6.

2. In Group I-3 occupancies, portable fire extinguishers shall be permitted to be located at staff locations and the access to such extinguishers shall be permitted to be locked.

M. Change Section 907.2.1.1 of the IBC to read:

907.2.1.1 System initiation in Group A occupancies with an occupant load of 1,000 or more and in certain night clubs. Activation of the fire alarm in Group A occupancies with an occupant load of 1,000 or more and in night clubs with an occupant load of 300 or more shall initiate a signal using an emergency voice and alarm communications system in accordance with Section 907.5.2.2.

Exception: Where approved, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed three minutes, for the sole purpose of allowing a live voice announcement from an approved, constantly attended location.

N. Change Section 907.2.3 of the IBC to read:

907.2.3 Group E. A manual fire alarm system that activates the occupant notification system meeting the requirements of Section 907.5 and installed in accordance with Section 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

Exceptions:

1. A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less.

2. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:

2.1. Interior corridors are protected by smoke detectors.

2.2. Auditoriums, cafeterias, gymnasiums, and similar areas are protected by heat detectors or other approved detection devices.

2.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.

3. Manual fire alarm boxes shall not be required in Group E occupancies where the building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, the occupant notification system will activate on sprinkler water flow and manual activation is provided from a normally occupied location.

O. Change Section 907.3.2 of the IBC to read:

907.3.2 Special locking systems. Where special locking systems are installed on means of egress doors in accordance with Section 407.4.1.1 or ~~1010.1.9.8~~ 1010.2.13, an automatic detection system shall be installed as required by that section.

P. Add an exception to Section 907.5.2.1.1 of the IBC to read:

Exception: Sound pressure levels in Group I-3 occupancies shall be permitted to be limited to only the notification of occupants in the affected smoke compartment.

Q. Delete Exception 1 from Section 907.5.2.3 and change the following row in Table 907.5.2.3.2 (portions of table not shown remain) of the IBC~~.~~ to read:

TABLE 907.5.2.3.2 VISIBLE ALARMS	
NUMBER OF SLEEPING UNITS OR DWELLING UNITS	SLEEPING ACCOMMODATIONS WITH VISIBLE ALARMS

R. Change Section 909.6 of the IBC to read:

909.6 Pressurization method. When approved by the building official, the means of controlling smoke shall be permitted by pressure differences across smoke barriers. Maintenance of a tenable environment is not required in the smoke-control zone of fire origin.

S. Change Section 911.1.3 of the IBC to read:

911.1.3 Size. The fire command center shall be a minimum of 96 square feet (9 m^2) in area with a minimum dimension of eight feet (2438 mm).

Exception: Where it is determined by the building official, after consultation with the fire official, that specific building characteristics require a larger fire command center, the building official may increase the minimum required size of the fire command center up to 200 square feet (19 m^2) in area with a minimum dimension of up to 10 feet (3048 mm).

T. Delete Section 912.2.2 of the IBC.

U. Change Sections 912.4 and 912.4.2 of the IBC to read:

912.4 Access. Immediate access to fire department connections shall be provided without obstruction by fences, bushes, trees, walls, or any other fixed or moveable object. Access to fire department connections shall be approved by the fire official.

Exception: Fences, where provided with an access gate equipped with a sign complying with the legend requirements of this section and a means of emergency operation. The gate and the means of emergency operation shall be approved by the fire official.

912.4.2 Clear space around connections. A working space of not less than 36 inches (762 mm) in width, 36 inches (914 mm) in depth, and 78 inches (1981 mm) in height shall be provided in front of and to the sides of wall-mounted fire department connections and around the circumference of free-standing fire department connections, except as otherwise required or approved by the fire official.

V. Replace Section 915 of the IBC with the following:

915.1 Carbon monoxide alarms. Carbon monoxide alarms shall comply with this section.

915.2 Group I or R. Group I or R occupancies located in a building containing a fuel-burning appliance or in a building that has an attached garage shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage ventilated in accordance with Section 404 of the IMC shall not be considered an attached garage.

Exception: Sleeping units or dwelling units that do not themselves contain a fuel-burning appliance or have an attached garage but that are located in a building with a fuel-burning appliance or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The sleeping unit or dwelling unit is located more than one story above or below any story that contains a fuel-burning appliance or an attached garage;
2. The sleeping unit or dwelling unit is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance or to an attached garage; and
3. The building is equipped with a common area carbon monoxide alarm system.

915.3 Group E. Classrooms in Group E occupancies located in a building containing a fuel-burning appliance or in a building that has an attached garage or small engine or vehicle shop shall be equipped with single-station carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions. An open parking garage, as defined in Chapter 2, or an enclosed parking garage

ventilated in accordance with Section 404 of the IMC shall not be considered an attached garage.

Exception: Classrooms that do not themselves contain a fuel-burning appliance or have an attached garage but are located in a building with a fuel-burning appliance or an attached garage, need not be equipped with single-station carbon monoxide alarms provided that:

1. The classroom is located more than 100 feet from the fuel burning appliance or attached garage or located more than one story above or below any story which contains a fuel-burning appliance or attached garage; and

2. The classroom is not connected by duct work or ventilation shafts to any room containing a fuel-burning appliance.

915.4 Carbon monoxide detection systems. Carbon monoxide detection systems, which include carbon monoxide detectors and audible notification appliances, installed and maintained in accordance with this section for carbon monoxide alarms and NFPA 720 shall be permitted. The carbon monoxide detectors shall be listed as complying with UL 2075.

W. Change the title of IBC Section 918 to read:

In-Building Emergency Communications Coverage.

X. Change Section 918.1 of the IBC to read:

918.1 General. For localities utilizing public safety wireless communications, dedicated infrastructure to accommodate and perpetuate continuous in-building emergency communication equipment to allow emergency public safety personnel to send and receive emergency communications shall be provided in new buildings and structures in accordance with this section.

Exceptions:

1. Buildings of Use Groups A-5, I-4, within dwelling units of R-2, R-3, R-4, R-5, and U.

2. Buildings of Types IV and V construction without basements~~,~~ that are not considered unlimited area buildings in accordance with Section 507.

3. Above grade single story buildings of less than 20,000 square feet.

4. Buildings or leased spaces occupied by federal, state, or local governments~~,~~ or the contractors thereof~~,~~ with security requirements where the building official has approved an alternative method to provide emergency communication equipment for emergency public safety personnel.

5. Where the owner provides technological documentation from a qualified individual that the structure or portion thereof does not impede emergency communication signals.

6. Buildings in localities that do not provide the additional communication equipment required for the operation of the system.

Y. Add Sections 918.1.1, 918.1.2, and 918.1.3 to the IBC to read:

918.1.1 Installation. In-building two-way emergency responder communication coverage systems shall comply with Sections 510.4 and 510.5 of the International Fire Code, except that the acceptance testing procedure required by Section 510.5.4 of the International Fire Code shall be the responsibility of the locality. The building owner shall install ~~radiating cable, such as coaxial cable or equivalent~~ cabling. The ~~radiating~~ cable shall be installed in dedicated conduits, raceways, plenums, attics, or roofs~~,~~ and compatible for these specific installations as well as other applicable provisions of this code. The locality shall be responsible for the installation of any additional communication equipment required for the operation of the system.

918.1.2 Operations. The locality will assume all responsibilities for the operation and maintenance of the emergency communication equipment. The building owner shall provide sufficient operational space within the building to allow the locality access to and the ability to operate in-building emergency communication equipment.

918.1.3 Inspection. In accordance with Section 113.3, all installations shall be inspected prior to concealment.

Z. Add Section 918.2 to the IBC to read:

918.2 Acceptance test. Upon completion of installation, after providing reasonable notice to the owner or ~~their~~ the owner's representative, emergency public safety personnel shall have the right during normal business hours~~,~~ or other mutually agreed upon time~~,~~ to enter onto the property to conduct field tests to verify that the required level of radio coverage is present at no cost to the owner. Any noted deficiencies in the installation of the radiating cable or operational space shall be provided in an inspection report to the owner or the owner's representative.

13VAC5-63-245. Chapter 10 Means of egress.

A. Delete Section 1002.2 of the IBC.

B. Change Section 1004.9 of the IBC to read:

1004.9 Posting of occupant load. Every room or space that is an assembly occupancy and where the occupant load of that room or space is 50 or more shall have the occupant load of the room or space posted for the intended configurations in a conspicuous place~~,~~ near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or the owner's authorized agent.

C. Change Exception 1 of Section 1005.3.1 of the IBC to read:

1. For other than Groups H and I-2 occupancies, the capacity, in inches (mm), of means of egress stairways shall be calculated by multiplying the occupant load served by such stairway by a means of egress capacity factor of 0.2 inch (5.1 mm) per occupant in buildings equipped with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

D. Change Exception 1 of Section 1005.3.2 of the IBC to read:

1. For other than Groups H and I-2 occupancies, the capacity~~,~~ in inches (mm)~~,~~ of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such component by a means of egress capacity factor of 0.15 inch (3.8 mm) per occupant in buildings equipped with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

E. Add Exception ~~3~~ 4 of Section 1006.2.1 of the IBC to read:

~~3.~~ 4. In Group R-2 and R-3 occupancies, one means of egress is permitted within and from individual dwelling units with a maximum occupant load of 20 where the dwelling unit is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and the common path of egress travel does not exceed 125 feet (38,100 mm). This exception shall also apply to Group R-2 occupancies where Section 903.2.8, Exception 1 or 2 is applicable.

F. Change the number "49" to "50" in the "Maximum Occupant Load of Space" column in the "A[c], E, M," "B," "F," and "U" rows of Table 1006.2.1 of the IBC.

G. Change the number "49" to "50" in the "Maximum Occupant Load per Story" column of the "A, B[b], E, F[b], M, U" row of Table ~~1006.3.3(2)~~ 1006.3.4.2(2).

H. Change Exception 2 of Section 1007.1.1 of the IBC to read:

2. Where a building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, the separation distance of the exit doors or exit access doorways shall not be less than one-fourth of the length of the maximum overall diagonal dimension of the area served.

I. Change Section 1009.6.4 of the IBC to read:

1009.6.4 Separation. Each area of refuge shall be separated from the remainder of the story by a smoke barrier complying with Section 709 or a horizontal exit complying with Section 1026. Each area of refuge shall be designed to minimize the intrusion of smoke.

Exceptions:

1. Areas of refuge located within an enclosure for interior exit stairways complying with Section 1023.

2. Areas of refuge in outdoor facilities where exit access is essentially open to the outside.

3. Areas of refuge where the area of refuge and areas served by the area of refuge are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

J. Change Section ~~1010.1.4.4~~ 1010.2.8 of the IBC to read:

~~1010.1.4.4 Locking arrangements in educational occupancies.~~ 1010.2.8 Emergency supplemental hardware. In Group E occupancies, except Group E day care facilities, ~~and~~ Group B educational occupancies, and public buildings, exit access doors from classrooms, offices, and other occupied rooms, except for exit doors and doors across corridors, shall be permitted to be provided with emergency supplemental hardware where all of the following conditions are met:

1. The door shall be capable of being opened from outside the room with a key, proprietary device provided by the manufacturer, or other approved means.

2. The door shall be openable from within the room in accordance with Section ~~1010.1.9,~~ 1010.2.3, except emergency supplemental hardware is not required to comply with Chapter 11.

Note: School officials and building owners should consult with their legal counsel regarding provisions of the Americans with Disabilities Act of 1990 (42 USC § 12101 et seq.) and any other applicable requirements.

3. Installation of emergency supplemental hardware on fire door assemblies must comply with Section 716.2. Modifications shall not be made to listed panic hardware, fire door hardware, or door closures.

4. The emergency supplemental hardware shall not be capable of being used on other doors not intended to be used and shall have at least one component that requires modification to~~,~~ or is permanently affixed to~~,~~ the surrounding wall, floor, door, or frame assembly construction for it to properly function.

5. Employees shall engage in lockdown training procedures on how to deploy and remove the emergency supplemental hardware, and its use shall be incorporated in the approved lockdown plan complying with the SFPC.

6. The emergency supplemental hardware and its components shall be maintained in accordance with the SFPC.

7. Approved emergency supplemental hardware shall be of consistent type throughout a building.

Exception: The building official may approve alternate types of emergency supplemental hardware in accordance with Section 110.1 when a consistent device cannot be installed.

K. Change Section ~~1010.1.6~~ 1010.1.5 of the IBC to read:

~~1010.1.6~~ 1010.1.5 Landings at doors. Landings shall have a width not less than the width of the stairway or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than ~~7~~ seven inches (178 mm). Where a landing serves an occupant load of 50 or more, other doors, gates, or turnstiles in any position shall not reduce the landing to less than one-half its required width nor prevent a door, gate, or turnstile from opening to less than one-half of the required landing width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

Exception: Landing length in the direction of travel in Groups R-3 and U and within individual units of Group R-2 need not exceed 36 inches (914 mm).

L. Add an exception to Sections ~~1010.1.9~~ 1010.2 and ~~1010.1.9.1~~ 1010.2.2 of the IBC to read:

Exception: Emergency supplemental hardware provided in accordance with Section ~~1010.1.4.4.~~ 1010.2.8.

M. Change Section ~~1010.1.9.2~~ 1010.2.3 of the IBC to read:

~~1010.1.9.2~~ 1010.2.3 Hardware height. Door handles, pulls, latches, locks, and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. Emergency supplemental hardware provided in accordance with Section ~~1010.1.4.4~~ 1010.2.8, shall be installed 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height.

Exception: Access doors or gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operable parts of the latch release on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided that the self-latching devices are not also self-locking devices operated by means of a key, electronic opener, or integral combination lock.

N. Change Item ~~2~~ 3 of Section ~~1010.1.9.4~~ 1010.2.4 of the IBC to read:

~~2.~~ 3. In buildings in occupancy Groups B, F, M, and S, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:

~~2.1.~~ 3.1. The locking device is readily distinguishable as locked.

~~2.2.~~ 3.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters one inch (25 mm) high on a contrasting background.

~~2.3.~~ 3.3. The use of the key-operated locking device is revocable by the building official for due cause.

O. Add Items ~~7, 7.1, and 7.2~~ 11, 11.1, and 11.2 to Section ~~1010.1.9.4~~ 1010.2.4 of the IBC to read:

~~7.~~ 11. Egress doors equipped with emergency supplemental hardware complying with Section 1010.1.4.4, from the egress side provided:

~~7.1.~~ 11.1. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS HARDWARE SHALL BE USED BY AUTHORIZED PERSONNEL ONLY. The sign shall be in letters ~~1~~ one inch (25 mm) high on a contrasting background.

~~7.2.~~ 11.2. The use of the emergency supplemental hardware is revocable by the building official or fire official for due cause.

P. Add Item 6 to Section ~~1010.1.9.5~~ 1010.2.5 of the IBC to read:

6. Emergency supplemental hardware provided in accordance with Section ~~1010.1.4.4~~ 1010.2.8.

Q. Add Item 5 to Section ~~1010.1.9.6~~ 1010.2.1 of the IBC to read:

5. One additional operation shall be permitted for release of emergency supplemental hardware provided in accordance with Section ~~1010.1.4.4.~~ 1010.2.8.

R. Delete Section ~~1010.1.9.7~~ 1010.2.14 of the IBC.

S. Add Exceptions 1 and 2 ~~and 3~~ to Section ~~1010.1.9.8~~ 1010.2.13 of the IBC to read:

Exceptions:

~~2.~~ 1. Approved, listed, delayed egress locks shall be permitted to be installed on doors serving Group A-3 airport facilities, provided they are installed in accordance with this section.

~~3.~~ 2. Emergency supplemental hardware shall not be considered a delayed egress locking system.

T. ~~Delete Exception 1 and change Exception 2 of Section 1010.1.10 of the IBC~~ Renumber Exceptions 3 and 4 to be Exceptions 2 and 3 of Section 1010.2.9; delete Exception 1 of Section 1010.2.9; renumber Exception 2 to be Exception 1 of Section 1010.2.9 of the IBC; and change Exception 1 to read:

~~Exception:~~ Exceptions:

1. Doors provided with panic hardware or fire exit hardware and serving a Group A or E occupancy shall be permitted to be electrically locked in accordance with Section ~~1010.1.9.10~~ 1010.2.11.

U. Add Section ~~1010.1.11~~ 1010.2.9.5 to the IBC to read:

~~1010.1.11~~ 1010.2.9.5 Locking certain residential sliding doors. In dwelling units of Group R-2 buildings, exterior sliding doors ~~which~~ that are one story or less above grade, ~~or~~ shared by two dwelling units, or are otherwise accessible

from the outside~~,~~ shall be equipped with locks. The mounting screws for the lock case shall be inaccessible from the outside. The lock bolt shall engage the strike in a manner that will prevent it from being disengaged by movement of the door.

Exception: Exterior sliding doors which are equipped with removable metal pins or charlie bars.

V. Add Section ~~1010.1.12~~ 1010.2.9.6 to the IBC to read:

~~1010.1.12~~ 1010.2.9.6 Door viewers in certain residential buildings. Entrance doors to dwelling units of Group R-2 buildings shall be equipped with door viewers with a field of vision of not less than 180 degrees.

Exception: Entrance doors having a vision panel or side vision panels.

W. Change Exception 3 of Section 1011.5.2 of the IBC to read:

3. In Group R-3 occupancies~~;~~, within dwelling units in Group R-2 occupancies~~;~~, and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual dwelling units in Group R-2 occupancies~~;~~, the maximum riser height shall be 8.25 inches (210 mm); the minimum tread depth shall be ~~9~~ nine inches (229 mm); the minimum winder tread depth at the walk line shall be 10 inches (254 mm); and the minimum winder tread depth shall be ~~6~~ six inches (152 mm). A nosing not less than 0.75 inch (19.1 mm) but not more than 1.25 inches (32 mm) shall be provided on stairways with solid risers where the tread depth is less than 11 inches (279 mm).

X. Delete Exception 4 from Section 1011.5.2 of the IBC.

Y. Add Exception ~~2~~ 4 to Section 1011.6 of the IBC to read:

~~2.~~ 4. A floor or landing is not required at the top of an interior flight of exit access stairs within individual dwelling units and sleeping units of Group R-2 occupancies and dwelling units of Group R-3 occupancies, including stairs in an enclosed private garage serving only an individual dwelling unit, provided that a door does not swing over the stairs.

~~Z. Delete Item 6 from Section 1011.16 of the IBC.~~

~~AA.~~ Z. Change Section 1015.8 (Items 1 through 4 remain) of the IBC to read:

1015.8 Window openings. Windows in Groups R-2 and R-3 buildings including dwelling units where the top of the sill of an operable window opening is located less than 18 inches (457 mm) above the finished floor and more than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building shall comply with one of the following:

~~1. Operable windows where the top of the sill of the opening is located more than 75 feet (22,860 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.~~

~~2. Operable windows where the openings will not allow a 4-inch diameter (102 mm) sphere to pass through the opening when the window is in its largest opened position.~~

~~3. Operable windows where the openings are provided with window fall prevention devices that comply with ASTM F 2090.~~

~~4. Operable windows that are provided with window opening control devices that comply with Section 1015.8.1.~~

~~BB.~~ AA. Add Exception 3 to Item 5 of Section 1016.2 of the IBC to read:

3. A maximum of one exit access is permitted to pass through kitchens, store rooms, closets, or spaces used for similar purposes provided such a space is not the only means of exit access.

~~CC.~~ BB. Change the following rows and delete footnote "b" in Table ~~1020.1~~ 1020.2, and delete Section 1020.2.1 of the IBC.

Table ~~1020.1~~ 1020.2
Corridor Fire-Resistance Rating

Occupancy	Occupant Load Served By Corridor	Required Fire-Resistance Rating (hours)	
		Without sprinkler system	With sprinkler system[b]
R	Greater than 10	1	0.5
~~I-1, I-3~~ I-1	All	Not Permitted	~~0~~ 1
I-3	All	Not Permitted	0

~~DD.~~ CC. Add an additional row to Table ~~1020.2~~ 1020.3 of the IBC to read:

Occupancy	Width (minimum)
In corridors of Group I-2 assisted living facilities licensed by the Virginia Department of Social Services serving areas with wheelchair, walker, and gurney traffic where residents are capable of self-preservation or where resident rooms have a means of egress door leading directly to the outside.	44 inches

~~EE.~~ DD. Add Exception 2 to Section 1023.5 of the IBC to read:

2. For buildings in other than Group H, with no more than two stories above grade plane and are equipped throughout

with an approved automatic sprinkler system in accordance with Section 903.3.1.1, structural members, other than columns, that are part of the primary structural frame supporting the roof sheathing, roof slab, or roof deck only and structural members that are secondary members supporting the roof sheathing, roof slab, or roof deck only~~,~~ shall be permitted to penetrate an interior exit stairway enclosure or a ramp enclosure. Such penetrations shall be protected in accordance with Section 714.

~~FF.~~ EE. Change Section 1023.9 of the IBC to read:

1023.9 Floor identification signs. A sign shall be provided at each floor landing in exit enclosures connecting more than three stories designating the floor level, the terminus of the top and bottom of the exit enclosure, and the identification of the stair or ramp by designation with a letter of the alphabet. The signage shall also state the story of~~,~~ and the direction to~~,~~ the exit discharge and the availability of roof access from the enclosure for the fire department. The sign shall be located five feet (1524 mm) above the floor landing in a position that is readily visible when the doors are in the open and closed positions. Floor level identification signs in tactile characters complying with ICC A117.1 shall be located at each floor level landing adjacent to the door leading from the enclosure into the corridor to identify the floor level.

~~GG.~~ FF. Add Exception 2 to Section 1024.6 of the IBC to read:

2. For buildings in other than Group H, with no more than two stories above grade plane and are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, structural members, other than columns, which are part of the primary structural frame supporting the roof sheathing, roof slab, or roof deck only and structural members ~~which~~ that are secondary members supporting the roof sheathing, roof slab, or roof deck only~~,~~ shall be permitted to penetrate an interior exit stairway enclosure or a ramp enclosure. Such penetrations shall be protected in accordance with Section 714.

~~HH.~~ GG. Change Section 1025.1 of the IBC to read:

1025.1 General. Approved luminous egress path markings delineating the exit path shall be provided in buildings of Groups A, B, E, I, M, and R-1 having occupied floors located more than 420 feet (128,016 mm) above the lowest level of fire department vehicle access in accordance with this section.

Exception: Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as part of the exit path in accordance with Section 1028.1, Exception 1.

~~II.~~ HH. Change Section 1026.2 of the IBC to read:

1026.2 Separation. The separation between buildings or refuge areas connected by a horizontal exit shall be provided by a fire wall complying with Section 706, by a fire barrier complying with Section 707, or a horizontal assembly complying with Section 711~~, or by both~~. The minimum fire-resistance rating of the separation shall be two hours. Opening protectives in horizontal exits shall also comply with Section 716. Duct and air transfer openings in a fire wall or fire barrier that ~~servers~~ serves as a horizontal exit shall also comply with Section 717. The horizontal exit separation shall extend vertically through all levels of the building unless floor assemblies have a fire-resistance rating of not less than two hours. Openings in horizontal assemblies on the story served by horizontal exits shall be protected in accordance with Sections 712.1.1, 712.1.3, and 712.1.13~~, or item 4 of Section 1019.3~~.

Exception: A fire-resistance rating is not required at horizontal exits between a building area and an above-grade pedestrian walkway constructed in accordance with Section 3104, provided that the distance between connected buildings is more than 20 feet (6096).

Horizontal exits constructed as fire barriers shall be continuous from exterior wall to exterior wall as to divide completely the floor served by the horizontal exit.

~~JJ. Delete the last sentence from Section 1030.5.~~

13VAC5-63-250. Chapter 11 Accessibility.

A. Add an exception to Section 1102.1 of the IBC to read:

Exception: Wall-mounted visible alarm notification appliances in Group I-3 occupancies shall be permitted to be a maximum of 120 inches (3048 mm) above the floor or ground, measured to the bottom of the appliance. Such appliances shall otherwise comply with all applicable requirements.

B. Change Section ~~to~~ 1103.2.8 of the IBC to read:

1103.2.8 Raised and lowered areas in places of religious worship. Raised or lowered areas~~,~~ or portions of areas~~,~~ in places of religious worship are not required to be accessible or to be served by an accessible route, provided such areas are used primarily for the performance of religious ceremonies and are located within an accessible story or mezzanine.

C. Add Section 1103.2.15 to the IBC to read:

1103.2.15 Emergency supplemental hardware. In Group E occupancies, except Group E day care facilities, ~~and~~ Group B educational occupancies, ~~when~~ and public buildings, emergency supplemental hardware is not required to comply with this chapter when deployed during an active shooter or hostile threat event and provided in accordance with Section ~~1010.1.4.4~~ 1010.2.8.

D. Change Section ~~1106.1~~ 1106.2 of the IBC and replace Table ~~1106.1~~ 1106.2 of the IBC with Tables ~~1106.1(1)~~ 1106.2(1) and ~~1106.1(2)~~ 1106.2(2) to read:

1106.1 Required. Where parking is provided, accessible parking spaces shall be provided in compliance with Tables ~~1106.1(1)~~ 1106.2(1) and ~~1106.1(2)~~ 1106.2(2), as applicable, except as required by Sections ~~1106.2~~ 1106.3 through ~~1106.4~~ 1106.5. Where more than one parking facility is provided on a site, the number of parking spaces required to be accessible shall be calculated separately for each parking facility.

Exception: This section does not apply to parking spaces used exclusively for buses, trucks, other delivery vehicles, law-enforcement vehicles, or vehicular impound and motor pools where lots accessed by the public are provided with an accessible passenger loading zone.

Table ~~1106.1(1)~~ 1106.2(1)
Accessible Parking Spaces for Groups A, B, E, M, R-1, R-2, and I[a]

Total Parking Spaces Provided	Required Minimum Number of Accessible Spaces
1 - 25	1
26 - 50	2
51 - 75	3
76 - 100	4
101 - 125	5
126 - 150	6
151 - 200	7
201 - 300	8
301 - 400	9
401 - 500	10
501 - 1,000	2.33% of total
1,001 and over	23, plus one for each 100, or fraction thereof, over 1,000

a. Condominium parking in Group R-2 occupancies where parking is part of the unit purchase shall be in accordance with Table 1106.1(2).

Table ~~1106.1(2)~~ 1106.2(2)
Accessible Parking Spaces for Groups F, S, H, R-3, R-4, and U

Total Parking Spaces Provided	Required Minimum Number of Accessible Spaces
1 - 25	1
26 - 50	2
51 - 75	3
76 - 100	4
101 - 150	5
151 - 200	6
201 - 300	7
301 - 400	8
401 - 500	9
501 - 1,000	2.0% of total
1,001 and over	20, plus one for each 100, or fraction thereof, over 1,000

E. Add Section ~~1106.8~~ 1106.10 to the IBC to read:

~~1106.8~~ 1106.10 Identification of accessible parking spaces. In addition to complying with applicable provisions of this chapter, all accessible parking spaces shall be identified by ~~above grade~~ above-grade signs. A sign or symbol painted or otherwise displayed on the pavement of a parking space shall not constitute an ~~above grade~~ above-grade sign. All ~~above grade~~ above-grade parking space signs shall have the bottom edge of the sign no lower than four feet (1219 mm) nor higher than seven feet (2133 mm) above the parking surface. All disabled parking signs shall include the following language: PENALTY, $100-500 Fine, TOW-AWAY ZONE. Such language may be placed on a separate sign and attached below existing ~~above grade~~ above-grade disabled parking signs, provided that the bottom edge of the attached sign is no lower than four feet above the parking surface.

F. Change Section ~~1109.2~~ 1110.2 (exceptions remain) of the IBC to read:

~~1109.2~~ 1110.2 Toilet and bathing facilities. Each toilet room and bathing room shall be accessible. Where a floor level is not required to be connected by an accessible route, the only toilet rooms or bathing rooms provided within the facility shall be located on the inaccessible floor. Except as provided for in Sections ~~1109.2.2~~ 1110.2.2 through ~~1109.2.4~~ 1110.2.6, at least one of each type of fixture, element, control, or dispenser in each accessible toilet room and bathing room shall be accessible.

G. Add Section ~~1109.2.4~~ 1110.2.6 to the IBC to read:

~~1109.2.4~~ 1110.2.6 Multi-user gender-neutral toilet facility fixtures. Where multi-user facilities are provided to serve all genders, at least two of each fixture type, but only one urinal if more than one urinal is provided, shall comply with ICC A117.1. Water closet and urinal compartments shall comply with Section ~~1209.3~~ 1210.3.

H. Add Sections ~~1109.16~~ 1110.17 and ~~1109.16.1~~ 1110.17.1 to the IBC to read:

~~1109.16~~ 1110.17 Dwellings containing universal design features for accessibility. Group R-5 occupancies not subject to Section R320.1 of the IRC and Group R-3 occupancies not subject to Section ~~1107.6.3~~ 1108.6.3 may comply with this section and be approved by the local building department as dwellings containing universal design features for accessibility.

~~1109.16.1~~ 1110.17.1 Standards for dwellings containing universal design features for accessibility. When the following requirements are met, approval shall be issued by the local building department indicating that a dwelling has been constructed in accordance with these standards and is deemed to be a dwelling containing universal design features for accessibility.

1. The dwelling must comply with the requirements for Type C units under Section ~~1005~~ 1105 of ICC A117.1 with the following changes to those requirements:

1.1. That at least one bedroom be added to the interior spaces required by Section ~~1005.4~~ 1105.4 of ICC A117.1.

1.2. In the toilet room or bathroom required by Section ~~1005~~ 1105 of ICC A117.1, in addition to the lavatory and water closet, a shower or bathtub complying with Section ~~1004.11.3.2.3~~ 1104.11.3.2.3 of ICC A117.1 shall be provided and shall include reinforcement for future installation of grab bars in accordance with Section ~~1004.11.1~~ 1104.11.1 of ICC A117.1.

1.3. That the exception to Section ~~1005.4~~ 1105.4 of ICC A117.1 is not applicable.

1.4. That there be a food preparation area complying with Section ~~1005.7~~ 1105.7 of ICC A117.1 on the entrance level.

1.5. That any thermostat for heating or cooling on the entrance level comply with Section ~~1002.9~~ 1102.9 of ICC A117.1.

I. Delete the exception for Item 1 of Section ~~1111.1~~ 1112.1 of the IBC.

13VAC5-63-260. Chapter 12 Interior environment.

A. Add Section 1202.5.4 to the IBC to read:

1202.5.4 Insect screens in occupancies other than Group R. Every door, window, and other outside opening for natural ventilation serving structures classified as other than a residential group containing habitable rooms, food preparation areas, food service areas, or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged, or stored~~,~~ shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device.

Exception: Screen doors shall not be required for out swinging doors or other types of openings which make screening impractical, provided other approved means, such as air curtains or insect repellent fans, are provided.

B. Add Section 1202.5.5 to the IBC to read:

1202.5.5 Insect screens in Group R occupancies. Every door, window, and other outside opening required for natural ventilation purposes ~~which~~ that serves a structure classified as a residential group shall be supplied with approved tightly fitted screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every screen door used for insect control shall have a self-closing device.

C. Add Section 1202.7 to the IBC to read:

1202.7 Smoking areas in restaurants. Smoking areas in restaurants, as defined in § 15.2-2820 of the Code of Virginia, shall comply with the following:

1. The area where smoking may be permitted shall be structurally separated from the portion of the restaurant in which smoking is prohibited. For the purposes of this section, structurally separated means a stud wall covered with drywall or other building material or like barrier, which, when completed, extends from the floor to the ceiling, resulting in a physically separated room. Such wall or barrier may include portions that are glass or other gas-impervious building material and shall be permitted to have a door leading to areas in which smoking is prohibited, provided the door is capable of being closed at all times.

2. The area where smoking may be permitted shall be separately vented to prevent the recirculation of air from such area to the area of the restaurant where smoking is prohibited.

Exception: The ~~above~~ requirements in Items 1 and 2 do not apply if a restaurant is exempt from~~,~~ or meets any of the exceptions to~~,~~ the Virginia Indoor Clean Air Act (Chapter 28.2 (§ 15.2-2820 et seq.) of Title 15.2 ~~(§ 15.2-2820 et seq.)~~ of the Code of Virginia).

D. Change Section 1206.1 of the IBC to read:

1206.1 Scope. Sections 1206.2 and 1206.3 shall apply to common interior walls, partitions, and floor or ceiling assemblies between adjacent dwelling units or between dwelling units and adjacent public areas, such as halls, corridors, stairs, or service areas. Section 1206.4 applies to the construction of the exterior envelope of Group R occupancies within airport noise zones and to the exterior envelope of Groups A, B, E, I, and M occupancies in any locality in whose jurisdiction~~,~~ or adjacent jurisdiction~~,~~ is located a United States Master Jet Base, a licensed airport, or United States government or military air facility~~,~~ when such requirements are enforced by a locality pursuant to § 15.2-2295 of the Code of Virginia.

E. Add Section 1206.4 to the IBC to read:

1206.4 Airport noise attenuation standards. Where the Ldn is determined to be 65 dBA or greater, the minimum Sound Transmission Class (STC) rating of structure components shall be provided in compliance with Table 1206.4. As an alternative to compliance with Table 1206.4, structures shall be permitted to be designed and constructed so as to limit the interior noise level to no greater than 45 Ldn. Exterior structures, terrain, and permanent plantings shall be permitted to be included as part of the alternative design. The alternative design shall be certified by an RDP.

F. Add Table 1206.4 to the IBC to read:

Table 1206.4
Airport Noise Attenuation Standards

Ldn	STC of exterior walls and roof/ceiling assemblies	STC of doors and windows
65–69	39	25
70–74	44	33
75 or greater	49	38

G. Change Sections ~~1209.3.1~~ 1210.3.1 and ~~1209.3.2~~ 1210.3.2 and add Sections ~~1209.3.1.1, 1209.3.1.2, 1209.3.2.1, and 1209.3.2.2~~ 1210.3.1.1, 1210.3.1.2, 1210.3.2.1, and 1210.3.2.2 to read:

~~1209.3.1~~ 1210.3.1 Water closet compartment. Each water closet utilized by the public or employees shall comply with Sections ~~1209.3.1.1~~ 1210.3.1.1 and ~~1209.3.1.2,~~ 1210.3.1.2, as applicable. All fully-enclosed compartments shall be provided with occupancy indicators.

Exceptions:

1. A separate room or compartment shall not be required in a single-occupant toilet room with a lockable door.

2. Toilet rooms located in child day care facilities and containing two or more water closets shall be permitted to have one water closet without an enclosing compartment.

3. This provision is not applicable to toilet areas located within Group I-3 occupancy housing areas.

~~1209.3.1.1~~ 1210.3.1.1 Separate facilities. Each water closet provided in separate facilities shall occupy a separate compartment with walls or partitions and a door enclosing the fixtures to ensure privacy and shall comply with Section 405.3.1 of the VPC. Accessible water closets and compartments shall comply with ICC A117.1.

~~1209.3.1.2~~ 1210.3.1.2 Multi-user gender-neutral facilities. Each water closet provided in a multi-user gender-neutral toilet facility shall occupy a separate compartment with walls or partitions, including the doors thereto, ~~which~~ that shall extend to the floor and to the ceiling with maximum 1/2-inch (13 mm) clearances at the floor and ceiling, with gaps not exceeding 1/8-inch (3 mm) between the doors and partitions and partitions and walls, and shall comply with Section 405.3.1 of the VPC. Accessible water closet compartments shall comply with ICC A117.1 and the increased toe clearance requirements.

~~1209.3.2~~ 1210.3.2 Urinal separation and partitions. Each urinal utilized by the public or employees shall occupy a separate area with walls or partitions to provide privacy and comply with Sections ~~1209.3.1.1~~ 1210.3.2.1 and ~~1209.3.1.2~~ 1210.3.2.2, as applicable. All fully-enclosed compartments shall be provided with occupy indicators.

Exceptions:

1. Urinal partitions shall not be required in a single-occupant ~~or~~, family, or assisted-use toilet room with a lockable door.

2. Toilet rooms located in child day care facilities and containing two or more urinals shall be permitted to have one urinal without partitions.

3. A separate room or compartment shall not be required in a single-occupant toilet room with a lockable door.

4. This provision is not applicable to toilet areas located within Group I-3 occupancy housing areas.

~~1209.3.2.1~~ 1210.3.2.1 Separate facilities. The walls or partitions for urinals in separate facilities shall begin at a height not more than 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18 inches (457 mm) or to a point not less than ~~6~~ six inches (152 mm) beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater.

~~1209.3.2.2~~ 1210.3.2.2 Multi-user gender-neutral facilities. Each urinal provided in a multi-user, gender-neutral toilet facility shall occupy a separate compartment with walls or partitions, including the doors thereto, where the partitions extend to the floor and to the ceiling with maximum 1/2-inch (13 mm) clearances, with gaps not exceeding 1/8-inch (3 mm) between the doors and partitions and partitions and walls, or shall all be located in a separate room with a door, enclosing the urinals to ensure privacy. Where an accessible urinal is located within a compartment, grab bars shall not be required for the urinal, the door shall be located to allow for a forward approach to the urinal, and increased toe clearances shall be provided in accordance with A117.1.

13VAC5-63-264. Chapter 13 Energy efficiency.

Add Section 1301.1.1.1 to the IBC to read:

1301.1.1.1 Changes to the IECC. The following changes shall be made to the IECC:

1. Add Sections C402.1.4.2, C402.1.4.2.1, C402.1.4.2.2, C402.1.4.2.3, C402.2.1.2, C402.2.1.3, C402.2.1.4, and C402.2.1.5 and change Section C402.2.1.1 to read:

C402.1.4.2 Roof/Ceiling assembly. The maximum roof/ceiling assembly U-factor shall not exceed that specified in Table C402.1.4 based on construction materials used in the roof/ceiling assembly.

C402.1.4.2.1 Tapered, above-deck insulation based on thickness. Where used as a component of a maximum roof/ceiling assembly U-factor calculation, the tapered roof insulation R-value contribution to that calculation shall use the average thickness in inches (mm) along with the material R-value per inch (per mm) for U-factor compliance as prescribed in Section C402.1.4.

C402.1.4.2.2 Suspended ceilings. Insulation installed on suspended ceilings having removable ceiling tiles shall not be considered part of the assembly U-factor of the roof/ceiling construction.

C402.1.4.2.3 Multiple layers and staggered joints. Continuous insulation board shall be installed in not less than two layers and the edge joints between each layer of insulation shall be staggered. Multiple layers and staggered joints are not required where insulation tapers to the roof deck at a gutter edge, roof drain, or scupper.

C402.2.1 Roof assembly. The minimum thermal resistance (R-value) of the insulating material installed either between the roof framing or continuously on the roof assembly shall be as specified in Table C402.1.3, based on construction materials used in the roof assembly.

C402.2.1.1 Tapered, above-deck insulation based on thickness. Where used as a component of a roof/ceiling assembly R-value calculation, the tapered roof insulation R-value contribution to that calculation shall use the average thickness in inches (mm) along with the material R-value per inch (per mm) for R-value compliance as prescribed in Section C402.1.3.

C402.2.1.2 Minimum thickness, lowest point. The minimum thickness of above-deck roof insulation at its lowest point, gutter edge, roof drain, or scupper shall be no less than 1 inch (25 mm).

C402.2.1.3 Suspended ceilings. Insulation installed on suspended ceilings having removable ceiling tiles shall not be considered part of the minimum thermal resistance (R-value) of roof insulation in roof/ceiling construction.

C402.2.1.4 Multiple layers and staggered joints. Continuous insulation board shall be installed in not less than two layers and the edge joints between each layer of insulation shall be staggered. Multiple layers and staggered joints are not required where insulation tapers to the roof deck at a gutter edge, roof drain or scupper.

C402.2.1.5 Skylight curbs. Skylight curbs shall be insulated to the level of roofs with insulation entirely above the deck or R-5, whichever is less.

Exception: Unit skylight curbs included as a component of a skylight listed and labeled in accordance with NFRC 100 shall not be required to be insulated.

2. Change the SHGC for Climate Zone 4 (Except Marine) of Table C402.4 to read:

Table C402.4 Building Envelope Requirements: Fenestration	
Climate Zone	4 (Except Marine)
SHGC	
SHGC	0.36

3. Change Sections C402.4.2, C402.4.2.1, and C402.4.2.2 and delete Section C402.4.1.2.

C402.4.2 Skylight area with daylight response controls. The skylight area shall be permitted to be not more than 5.0% of the roof area provided daylight responsive controls complying with Section C405.2.3.1 are installed in daylight zones under skylights.

C402.4.2.1 Daylight zone controls under skylights. Daylight responsive controls complying with Section C405.2.3.1 shall be provided to control all electric lights within daylight zones under skylights.

C402.4.2.2 Haze factor. Skylights that are installed in office, storage, automotive service, manufacturing, nonrefrigerated warehouse, retail store, and distribution/sorting area spaces shall have a glazing material or diffuser with a haze factor greater than 90% when tested in accordance with ASTM D1003.

Exception: Skylights designed and installed to exclude direct sunlight entering the occupied space by the use of fixed or automated baffles or the geometry of skylight and light well.

4. Change Section C402.4.3 to read:

C402.4.3 Maximum U-factor and SHGC. The maximum U-factor and solar heat gain coefficient (SHGC) for fenestration shall be as specified in Table C402.4.

The window projection factor shall be determined in accordance with Equation 4-5.

(Equation 4-5)

PF = A/B

where:

PF = Projection factor (decimal).

A = Distance measured horizontally from the farthest continuous extremity of any overhand, eave, or

~~permanently attached shading device to the vertical surface of the glazing.~~

~~B = Distance measured vertically from the bottom of the glazing to the underside of the overhang, eave, or permanently attached shading device.~~

~~Where different windows or glass doors have different PF values, they shall each be evaluated separately.~~

~~Where the fenestration projection factor for a specific vertical fenestration product is greater than or equal to 0.20, the required maximum SHGC from Table C402.4 shall be adjusted by multiplying the required maximum SHGC by the multiplier specified in Table C402.4.3 corresponding with the orientation of the fenestration product and the projection factor.~~

~~5. Add Table C402.4.3 to read:~~

~~Table C402.4.3~~

~~SHGC Adjustment Multipliers~~

~~Projection factor~~	~~Oriented within 45 degrees of true north~~	~~All other orientations~~
~~0.2 ≤ PF < 0.5~~	~~1.1~~	~~1.2~~
~~PF ≥ 0.5~~	~~1.2~~	~~1.6~~

1. Add Section C402.1.6 to read:

C402.1.6 Groups F, S, and U. Appendix CD may be used as an alternative to the building thermal envelope provisions of this code for Groups F, S, and U.

~~6.~~ 2. Add an exception to the first paragraph of Section ~~403.7.7~~ C403.7.7 to read:

Exception: ~~Any~~ Where a grease duct serving a Type I hood is installed in accordance with IMC Section 506.3 ~~shall not be required to have a~~, motorized or gravity ~~damper~~ dampers shall not be installed.

~~7.~~ 3. Add Section C403.2.2.1 to read:

C403.2.2.1 Dwelling unit mechanical ventilation. Mechanical ventilation shall be provided for dwelling units in accordance with the IMC.

~~8.~~ 4. Delete Section C403.7.5 and Table C403.7.5.

~~9.~~ 5. Delete Sections C404.5 through C404.5.2.1, including Tables.

6. Change Section C405.4 to read:

C405.4 Exterior ~~lighting (Mandatory)~~ lighting. All exterior lighting, other than low-voltage landscape lighting, shall comply with Section C405.4.1.

Exception: Where approved because of historical, safety, signage, or emergency considerations.

~~10.~~ 7. Change Section C502.1 to read:

C502.1 General. Additions to an existing building, building system, or portion thereof shall conform to the provisions of Section 805 of the VEBC.

~~11.~~ 8. Delete Sections C502.2 through ~~C502.2.6.2.~~ C502.3.6.2.

~~12.~~ 9. Change Section C503.1 to read:

C503.1 General. Alterations to any building or structure shall comply with the requirements of Chapter 6 of the VEBC.

~~13.~~ 10. Delete Sections C503.2 through ~~C503.6.~~ C503.5.

~~14.~~ 11. Change Section C504.1 to read:

C504.1 General. Buildings ~~and~~, structures, and parts thereof~~,~~ shall be repaired in compliance with Section 510 of the VEBC.

~~15.~~ 12. Delete Section C504.2.

~~16. Change Section R401.2 to read:~~

~~R401.2 Compliance. Projects shall comply with all provisions of Chapter 4 labeled "Mandatory" and one of the following:~~

~~1. Sections R401 through R404.~~

~~2. Section R405.~~

~~3. Section R406.~~

~~4. The most recent version of REScheck, keyed to the 2018 IECC.~~

~~17.~~ 13. Add Appendix CD to read:

APPENDIX CD BUILDING ENVELOPE REQUIREMENTS.

D101 Scope.

CD101.1 General. These provisions shall be permitted as an alternative to building thermal envelope requirements for building areas containing uses that are classified as Group F, S or U.

CD102 Building Envelope Requirements.

CD102.1 Insulation and fenestration criteria. The building thermal envelope shall meet the requirements of Tables CD102.2(1) and CD102.3 based on the climate zone specified in Chapter 3 CE. Buildings with a vertical fenestration area or skylight area that exceeds that allowed in Table CD102.3 shall comply with the building envelope provisions of ASHRAE/IESNA 90.1.

CD102.2 Specific insulation requirements. Opaque assemblies shall comply with Table CD102.2(1).

CD102.2.1 Roof assembly. The minimum thermal resistance (R-value) of the insulating material installed either between the roof framing or continuously on the roof assembly shall be as specified in Table CD102.2(1) based on construction materials used in the roof assembly.

Exception: Continuously insulated roof assemblies where the thickness of insulation varies one inch (25 .4 mm) or less and where the area weighted U-factor is equivalent to the same assembly with the R-value specified in Table CD102.2(1).

Insulation installed on a suspended ceiling with removable ceiling tiles shall not be considered part of the minimum thermal resistance of the roof insulation.

CD102.2.2 Classification of walls. Walls associated with the building envelope shall be classified in accordance with Section CD102.2.2.1 or D102.2.2.2.

CD102.2.2.1 Above-grade walls. Above-grade walls are those walls covered by Section CD102.2.3 on the exterior of the building and completely above grade or walls that are more than 15 percent above grade.

CD102.2.2.2 Below-grade walls. Below-grade walls covered by Section CD102.2.4 are basement or first-story walls associated with the exterior of the building that are at least 85% below grade.

CD102.2.2.3 Above-grade walls. The minimum thermal resistance (R-value) of the insulating materials installed in the wall cavity between the framing members and continuously on the walls shall be as specified in Table CD102.2(1) based on framing type and construction materials used in the wall assembly. The R-value of integral insulation installed in concrete masonry units (CMU) shall not be used in determining compliance with Table CD102.2(1). "Mass walls" shall include walls weighing at least (i) 35 pounds per square foot (170 kg/m^2) of wall surface area or (ii) 25 pounds per square foot (120 kg/m^2) of wall surface area if the material weight is not more than 120 pounds per cubic foot (1,900 kg/m^3).

CD102.2.4 Below-grade walls. The minimum thermal resistance (R-value) of the insulating material installed in or continuously on the below-grade walls shall be as specified in Table CD102.2(1) and shall extend to a depth of 10 feet I (3048 mm) below the outside finish ground level or to the level of the floor, whichever is less.

CD102.2.5 Floors over outdoor air or unconditioned space. The minimum thermal resistance (R-value) of the insulating material installed either between the floor framing or continuously on the floor assembly shall be as specified in Table CD102.2(1) based on construction materials used in the floor assembly.

"Mass floors" shall include floors weighing at least (i) 35 pounds per square foot (170 kg/m^2) of floor surface area or (ii) 25 pounds per square foot (120 kg/m^2) of floor surface area if the material weight is not more than 12 pounds per cubic foot (1,900 kg/m^3).

CD102.2.6 Slabs on grade. The minimum thermal resistance (R-value) of the insulation around the perimeter of unheated or heated slab-on-grade floors shall be as specified in Table CD102.2(1). The insulation shall be placed on the outside of the foundation or on the inside of a foundation wall. The insulation shall extend downward from the top of the slab for a minimum distance as shown in the table or to the top of the footing, whichever is less, or downward to at least the bottom of the slab and then horizontally to the interior or exterior for the total distance shown in the table.

CD102.2.7 Opaque doors. Opaque doors (doors having less than 50% glass area) shall meet the applicable requirements for doors as specified in Table CD102.2(1) and be considered as part of the gross area of above-grade walls that are part of the building envelope.

TABLE CD102.2(1) OPAQUE THERMAL ENVELOPE INSULATION COMPONENT MINIMUM REQUIREMENTS, R-VALUE[a] METHOD

CLIMATE ZONE	3	4 EXCEPT MARINE	5 AND MARINE 4
Roofs			
Insulation entirely above roof deck	R-15ci	R-15ci	R-15ci
Metal buildings (with R-5 thermal blocks[a])[b]	R-19	R-19	R-19
Attic and other	R-30	R-30	R-30
Walls, above grade			
Mass	R-5.7ci[c, e]	R-5.7ci[c]	R-7.6ci
Metal building[b]	R-13	R-13	R-13 + R-13
Metal framed	R-13	R-13	R-13 + R-3.8ci
Wood framed and other	R-13	R-13	R-13
Walls, below grade			
Below-grade wall[d]	NR	NR	NR

Floors			
Mass	R-5ci	R-10ci	R-10ci
Joist/framing	R-19	R-19	R-19
Slab-on-grade floors			
Unheated slabs	NR	NR	NR
Heated slabs	R-7.5 for 12″ below	R-7.5 for 12″ below	R-7.5 for 24″ below
Opaque doors			
Swinging	U - 0.70	U - 0.70	U - 0.70
Roll-up or sliding	U - 1.45	U - 1.45	U - 1.45

For SI: 1 inch = 25.4 mm

1 pound per square foot = 4.88 kg/m^2

1 pound per cubic foot = 16 kg/m^3

ci = Continuous Insulation

NR = No requirement

a. Thermal blocks are a minimum R-5 of rigid insulation which extends 1-inch beyond the width of the purlin on each side, perpendicular to the purlin.

b. Assembly description can be found in Table CD102.2(2).

c. R-5.7ci is allowed to be substituted with concrete block walls complying with ASTM C90, ungrouted or partially grouted at 32 inches or less on center vertically and 48 inches or less on center horizontally, with ungrouted cores filled with materials having a maximum thermal conductivity of 0.44 Btu-in/h-f^2 °F.

d. Where heated slabs are below grade, below-grade walls shall comply with the exterior insulation requirements for perimeter insulation according to the heated slab-on-grade construction.

e. Insulation is not required for mass walls in Climate Zone 3A located below the "Warm-Humid" line, and in Zone 3B.

TABLE CD102.2(2) METAL BUILDING ASSEMBLY DESCRIPTIONS

ROOFS	DESCRIPTIONS	REFERENCE
R-19 + R-10	Filled cavity roof. Thermal blocks are a minimum, R-5 of rigid insulation, which extends 1 inch beyond the width of the purlin on each side, perpendicular to the purlin.	ASHRAE/IESNA 90.1-2004 Table A2.3
R-19	Standing seam with single insulation layer. Thermal blocks are a minimum R-5 of rigid insulation, which extends 1 inch beyond the width of the purlin on each side, perpendicular to the purlin. This construction R-19 insulation batts draped perpendicularly over the purlins. Thermal blocks are then placed above the purlin/batt, and the roof deck is secured to the purlins.	ASHRAE/IESNA 90.1-2004 Table A2.3
Walls		
R-13	Single insulation layer The first layer of R-13 insulation batts is installed continuously perpendicular to the girts and is compressed as the metal skin is attached to the girts.	ASHRAE/IESNA 90.1-2004 Table A3.2
R-13 + R-13	Double insulation layer The first layer of R-13 insulation batts is installed continuously perpendicular to the girts and is compressed as the metal skin is attached to the girts.	ASHRAE/IESNA 90.1-2004 Table A3.2

For SI: 1 inch = 25.4 mm.

CD102.3 Fenestration. Fenestration shall comply with Table CD102.3.

CD102.3.1 Maximum area. The vertical fenestration area (not including opaque doors) shall not exceed the percentage of the gross wall area specified in Table CD102.3. The skylight area shall not exceed the percentage of the gross roof area specified in Table CD102.3.

CD102.3.2 Maximum U-factor and solar heat gain coefficient (SHGC). For vertical fenestration, the maximum U-factor and solar heat gain coefficient (SHGC) shall be as specified in Table CD102.3 based on the window projection factor. For skylights, the maximum U-factor and SHGC shall be as specified in Table CD102.3.

The window projection factor shall be determined in accordance with Equation CD-1.

PF = A/B (Equation CD-1)

where:

PF = Projection factor (decimal).

A = Distance measured horizontally from the furthest continuous extremity of any overhang, eave, or permanently attached shading device to the vertical surface of the glazing.

B = Distance measured vertically from the bottom of the glazing to the underside of the overhang, eave, or permanently attached shading device.

Where different windows or glass doors have different PF values, they shall each be evaluated separately, or an area-weighted PF value shall be calculated and used for all windows and glass doors.

CD102.4 Air leakage.

CD102.4.1 Window and door assemblies. The air leakage of window and sliding or swinging door assemblies that are part of the building envelope shall be determined in accordance with AAMA/WDMA/CSA 101/I.S.2/A440, or I NFRC 400 by an accredited, independent laboratory and labeled and certified by the manufacturer and shall not exceed the values in Section C402.4.2.

Exception: Site-constructed windows and doors that are weatherstripped or sealed in accordance with Section CD102.4.3.

CD102.4.2 Curtain wall, storefront glazing, and commercial entrance doors. Curtain wall, storefront glazing, and commercial glazed swinging entrance doors and revolving doors shall be tested for air leakage at 1.57 pounds per square foot (psf) (75 Pa) in accordance with ASTM E 283. For curtain walls and storefront glazing, the maximum air leakage rate shall be 0.3 cubic foot per minute per square foot (cfm/ft^2) (5.5 m^3/h x m^2) of fenestration area. For commercial glazed swinging entrance doors and revolving doors, the maximum air leakage shall be 1.00 cfm/ft^2 (18.3 m^3/h x m^2) of door area when tested in accordance with ASTM E 283.

CD102.4.3 Sealing of the building envelope. Openings and penetrations in the building envelope shall be sealed with caulking materials or closed with gasketing systems compatible with the construction materials and location. Joints and seams shall be sealed in the same manner or taped or covered with a moisture vapor-permeable wrapping material. Sealing materials spanning joints between construction materials shall allow for expansion and contraction of the construction materials.

CD102.4.4 Outdoor air intakes and exhaust openings. Stair and elevator shaft vents and other outdoor air intakes and exhaust openings integral to the building envelope shall be equipped with not less than a Class I motorized, leakage-rated damper with a maximum leakage rate of four cfm per square foot (6.8 L/s – C m^2) at 1.0 inch water gauge (w.g.) (1250 Pa) when tested in accordance 1.0 inch with AMCA 500D.

Exception: Gravity (nonmotorized) dampers are permitted to be used in buildings less than three stories in height above grade.

CD102.4.5 Loading dock weather seals. Cargo doors and loading dock doors shall be equipped with weather seals to restrict infiltration when vehicles are parked in the doorway.

CD102.4.6 Vestibules. A door that separates conditioned space from the exterior shall be protected with an enclosed vestibule, with all doors opening into and out of the vestibule equipped with self-closing devices. Vestibules shall be designed so that in passing through the vestibule it is not necessary for the interior and exterior doors to open at the same time.

Exceptions:
1. Buildings in Climate Zones I and 2 as indicated in Figure C301.1 and Table C301.1.

2. Doors not intended to be used as a building entrance door, such as doors to mechanical or electrical equipment rooms.

3. Doors opening directly from a sleeping unit or dwelling unit.

4. Doors that open directly from a space less than 3,000 square feet (298 m^2) in area.

5. Revolving doors.

6. Doors used primarily to facilitate vehicular movement or material handling and adjacent personnel doors.

TABLE CD102.3 BUILDING ENVELOPE REQUIREMENTS: FENESTRATION			
CLIMATE ZONE	3	4 EXCEPT MARINE	5 AND MARINE 4
Vertical fenestration (40% maximum of above-grade wall)			
U-factor			
Framing materials other than metal with or without metal reinforcement or cladding			
U-factor	0.65	0.40	0.35
Metal framing with or without thermal break			
Curtain Wall/Storefront U-factor	0.60	0.50	0.45
Entrance Door U-factor	.90	.85	.80
All Other U-factor[a]	.65	.55	.55
SHGC-All frame types			
SHGC: PF < 0.25	.25	.40	.40
SHGC: 0.25 ≤ PF < 0.5	.33	NR	NR
SHGC ≥ 0.5	0.40	NR	NR
Skylights (3.0% maximum)			
Glass			
U-Factor	0.90	0.60	0.60
SHGC	0.40	0.40	0.40
Plastic			
U-Factor	1.30	1.30	1.30
SHGC	0.35	0.62	0.62

NR = No requirement

PF = Projection factor (See Section CD102.3.2).

a. All others includes operable windows, fixed windows, and nonentrance doors.

CD102.4.7 Recessed luminaires. When installed in the building envelope, recessed luminaires shall meet one of the following requirements:

1. Type IC rated, manufactured with no penetrations between the inside of the recessed fixture and ceiling cavity and sealed or gasketed to prevent air leakage into the unconditioned space.

2. Type IC or non-IC rated, installed inside a sealed box constructed from a minimum 0.5-inch-thick (12.7 mm) gypsum wallboard or constructed from a preformed polymeric vapor barrier or other air-tight assembly manufactured for this purpose, while maintaining required clearances of not less than 0.5 inch (12.7 mm) from combustible material and not less than three inches (76 mm) from insulation material.

3. Type IC rated, in accordance with ASTM E 283 admitting no more than 2.0 cubic feet per minute (cfm) (0.944 L/s) of air movement from the conditioned space to the ceiling cavity. The luminaire shall be tested at 1.57 psf (75 Pa) pressure difference and shall be labeled.

CD102.5 Moisture control. All framed walls, floors, and ceilings not ventilated to allow moisture to escape shall be provided with an approved vapor retarder having a permeance rating of one perm (5.7 x 10-11 kg/Pa· s · m2) or less when tested in accordance with the dessicant method using Procedure A of ASTM E 96. The vapor retarder shall be installed on the warm-in-winter side of the insulation.

Exceptions:
1. Buildings located in Climate Zones 1 through 3 as indicated in Figure C301.1 and Table C301.1.

2. In construction where moisture or its freezing will not damage the materials.

3. Where other approved means to avoid condensation in unventilated framed wall, floor, roof, and ceiling cavities are provided.

~~Change~~ 14. Add an exception to Section R401.3 to read:

~~R401.3 A permanent certificate shall be completed by the builder or other approved party and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label, or other required labels. Where approved, certificates for multi-family dwelling units shall be permitted to be located off-site at an identified location. The certificate shall indicate the predominant R-values of insulation installed in or on ceilings, roofs, walls, foundation components such as slabs, basement walls, crawl space walls and floors, and ducts outside conditioned spaces; U-factors of fenestration and the solar heat gain coefficient (SHGC) of fenestration; and the results from any required duct system and building envelope air leakage testing performed on the building. Where there is more than one value for each component, the certificate shall indicate the value covering the largest area. The certificate shall indicate the types and efficiencies of heating, cooling, and service water heating equipment. Where a gas-fired unvented room heater, electric furnace, or baseboard electric heater is installed in the residence, the certificate shall indicate "gas-fired unvented room heater," "electric furnace," or "baseboard electric heater," as appropriate. An efficiency shall not be indicated for gas-fired unvented room heaters, electric furnaces, and electric baseboard heaters~~

Exception: Where approved, certificates for multi-family dwelling units shall be permitted to be located off-site at an identified location.

~~18.~~ 15. Change the wood frame wall R-value categories for Climate ~~Zone 4 (Except Marine)~~ Zones 3A, 4A, and 5A in Table ~~R402.1.2~~ R402.1.3 to read:

Wood Frame Wall R-Value
15 or 13+1[h]

~~19.~~ 16. Change the ~~ceiling U-factor and~~ frame wall U-factor categories for Climate ~~Zone 4 (Except Marine)~~ Zones 3A, 4A, and 5A in Table ~~R402.1.4~~ R402.1.2 to read:

Frame Wall U-Factor
0.079

~~20.~~ 17. Change Section R402.2.4 to read:

R402.2.4 Access hatches and doors. Access doors from conditioned spaces to unconditioned spaces (e.g., attics and crawl spaces) shall be weatherstripped and insulated in accordance with the following values:

1. Hinged vertical doors shall have a minimum overall R-5 insulation value;

2. Hatches and scuttle hole covers shall be insulated to a level equivalent to the insulation on the surrounding surfaces; and

3. Pull down stairs shall have a minimum of 75% of the panel area having R-5 rigid insulation.

Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose fill insulation is installed, the purpose of which is to prevent the loose fill insulation from spilling into the living space when the attic access is opened and to provide a permanent means of maintaining the installed R-value of the loose fill insulation.

~~21. Change Sections R402.4 and R402.4.1.1 to read:~~

~~R402.4 Air leakage. The building thermal envelope shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.5.~~

~~R402.4.1.1 Installation (Mandatory). The components of the building thermal envelope as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, as applicable to the method of construction. Where required by the code official, an approved third party shall inspect all components and verify compliance.~~

~~22.~~ 18. Change the title of the "Insulation Installation Criteria" category of Table R402.4.1.1; change the "Shower/tub on exterior wall" category of Table R402.4.1.1, and add footnotes ~~"b" and~~ "c" and "d" to Table R402.4.1.1 to read:

Component	Air Barrier Criteria	Insulation Installation Criteria[b] [d]
Shower/tub on exterior wall[c]	The air barrier installed at exterior walls adjacent to showers and tubs shall be installed on the interior side and separate the exterior walls from the showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.
c. Air barriers used behind showers and tubs on exterior walls shall be of a permeable material that does not cause the entrapment of moisture in the stud cavity. ~~b.~~ d. Structural integrity of headers shall be in accordance with the applicable building code.		

~~23.~~ 19. Change Section R402.4.1.2 to read:

R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour in Climate Zone 4. Testing shall be conducted in accordance with RESNET/ICC 380, ASTM E 779, or ASTM E 1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be conducted by a Virginia licensed general contractor, a Virginia licensed HVAC contractor, a Virginia licensed home inspector, a Virginia registered design professional, a certified BPI Envelope Professional, a certified HERS rater, or a certified duct and envelope tightness rater. The party conducting the test shall have been trained on the equipment used to perform the test. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Note: Should additional sealing be required as a result of the test, consideration may be given to the issuance of a temporary certificate of occupancy in accordance with Section 116.1.1.

During testing:

1. Exterior windows and doors and fireplace and stove doors shall be closed, but not sealed beyond the intended weatherstripping or other infiltration control measures;

2. Dampers, including exhaust, intake, makeup air, backdraft, and flue dampers, shall be closed, but not sealed beyond intended infiltration control measures;

3. Interior doors, if installed at the time of the test, shall be open;

4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;

5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and

6. Supply and return registers, if installed at the time of the test, shall be fully open.

20. Change Section R402.4.1.3 to read:

R402.4.1.3 Leakage rate: When complying with Section R401.2.1, the building or dwelling unit shall have an air leakage rate not exceeding 5.0 air changes per hour in Climate Zones 3 through 5 when tested in accordance with Section R402.4.1.2.

21. Add Section R403.1.3 to read:

R403.1.3 Heat pump as primary space heat source. Electric resistance heat shall not be used as the primary heat source for electric space heating if a ducted or ductless heat pump can be installed. Electric resistance space heating may be used for defrost, supplemental, or emergency heat, A heat pump shall be designed so that, except during defrost or emergency heating modes, supplemental heating does not energize unless the outdoor temperature is below 40ºF (4ºC).

~~24.~~ 22. Change the last paragraph of Section ~~R403.3.3~~ R403.3.5 to read:

~~R403.3.3 Duct testing (Mandatory). Ducts shall be pressure tested to determine air leakage by one of the following methods:~~

~~1. Rough in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.~~

~~2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.~~

~~Exception: A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.~~

A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. The licensed mechanical contractor installing the mechanical system shall be permitted to perform the duct testing. The contractor shall have been trained on the equipment used to perform the test.

~~25. Delete~~ 23. Change Section ~~R403.3.5.~~ R403.3.7 to read:

N1103.3.7 (R403.3.7) Building cavities. Building framing cavities used as ducts or plenums shall comply with VRC Section M1601.1.1.

~~26.~~ 24. Change Section R403.7 to read:

R403.7 Equipment and appliance sizing. Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

Exception: Heating and cooling equipment and appliance sizing shall not be limited to the capacities determined in accordance with Manual S or other approved sizing methodologies where any of the following conditions apply:

1. The specified equipment or appliance utilizes multi-stage technology or variable refrigerant flow technology and the loads calculated in accordance with the approved heating and cooling methodology fall within the range of the manufacturer's published capacities for that equipment or appliance.

2. The specified equipment or appliance manufacturer's published capacities cannot satisfy both the total and sensible heat gains calculated in accordance with the

approved heating and cooling methodology and the next larger standard size unit is specified.

3. The specified equipment or appliance is the lowest capacity unit available from the specified manufacturer.

~~27. Delete Sections C404.5 through C404.5.2.1, including Tables.~~

~~28.~~ 25. Change ~~footnote "a" in Table R406.4~~ Section R406.3.2 to read:

Section R406.3.2 Onsite renewables are included. When onsite renewable energy is included for compliance using the ERI analysis per Section R406.4, the building thermal envelope shall be greater than or equal to levels of energy efficiency and solar heat gain coefficient in Table R402.1.2, with a ceiling R-value of 49 and a wood frame wall R-value of 20 or 13+5 or Table R402.1.4, with a ceiling U-factor of 0.026 and a frame wall U-factor of 0.060.

~~a. When onsite renewable energy is included for compliance using the ERI analysis per Section R406.4, the building shall meet the mandatory requirements of Section R406.2 and the building thermal envelope shall be greater than or equal to levels of energy efficiency and solar heat gain coefficient in Table R402.1.2, with a ceiling R-value of 49 and a wood frame wall R-value of 20 or 13+5, or Table R402.1.4, with a ceiling U-factor of 0.026 and a frame wall U-factor of 0.060.~~

~~29.~~ 26. Change Section R501.1 to read:

R501.1 Scope. The provisions of the Virginia Existing Building Code shall control the alteration, repair, addition, and change of occupancy of existing buildings and structures.

~~30.~~ 27. Delete Sections R501.1.1 through R501.6.

~~31.~~ 28. Change Section R502.1 to read:

R502.1 General. Additions to an existing building, building system, or portion thereof shall conform to the provisions of Section 811 of the VEBC.

~~32.~~ 29. Delete Sections ~~R502.1.1~~ R502.2 through ~~R502.1.2~~ R502.3.4.

~~33.~~ 30. Change Section R503.1 to read:

R503.1 General. Alterations to any building or structure shall comply with the requirements of Chapter 6 of the VEBC.

~~34.~~ 31. Delete Sections R503.1.1 through ~~R503.2~~ R503.1.4.

~~35.~~ 32. Change Section R504.1 to read:

R504.1 General. Buildings, structures, and parts thereof shall be repaired in compliance with Section 510 of the VEBC.

~~36.~~ 33. Delete Section R504.2.

13VAC5-63-267. Chapter 14 Exterior walls.

A. Delete Section 1402.5 of the IBC.

B. Add Section 1402.8 to the IBC to read:

1402.8 Air barriers. The exterior wall envelope shall be designed and constructed by providing air barriers that comply with the IECC.

C. Change Section ~~1406.10.4~~ 1406.10.3 of the IBC to read:

~~1406.10.4~~ 1406.10.3 Full-scale test. The metal composite material (MCM) system shall be tested in accordance with~~,~~ and comply with~~,~~ the acceptance criteria of NFPA 285. Such testing shall be performed on the MCM system with the MCM in the maximum thickness intended for use. Where noncombustible materials or combustible materials permitted by Section 603, 803, 806, or 1406 differ from assembly to assembly or within an assembly, multiple tests shall not be required.

Exception: The MCM system is not required to be tested in accordance with, and comply with, acceptance criteria of NFPA 285 in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

13VAC5-63-268. Chapter 15 Roof assemblies and rooftop structures.

A. Change the title of IBC Section 1511 to read:

Roofing and Roofing Repair.

B. Change Section 1511.1 of the IBC to read as follows and delete the remainder of Section 1511 of the IBC:

1511.1 General. Materials and methods of application used for reroofing and roof repair shall comply with the applicable requirements of Chapter 15 and the requirements of Sections ~~302.2,~~ 302.1, 501.1, and ~~602.3.4~~ 602.3.2 of the VEBC, as applicable.

13VAC5-63-270. Chapter 16 Structural design.

A. Add the following notation to the list of notations in Section 1602.1 (all other notations remain):

V_T = Tornado speed, miles per hour (mph) (m/s) determined from Chapter 32 of ASCE 7.

B. Change Section 1603.1.4 of the IBC to read:

1603.1.4 Wind and tornado design data. The following information related to wind loads and, where required by Section 1609.5 tornado loads, shall be shown regardless of whether wind loads govern the design of the lateral force-resisting system of the structure:

1. Basic wind speed, V (mph), tornado speed, V_T, and allowable stress design wind speed, V_{asd}, as determined in accordance with Section 1609.3.1.

2. Risk category.

3. Effective plan area, A_e for tornado design in accordance with Chapter 32 of ASCE 7.

4. Wind exposure. Applicable wind direction if more than one wind exposure is utilized.

5. Applicable internal pressure coefficients and applicable tornado internal pressure coefficients.

6. Design wind pressures and their applicable zones with dimensions to be used for exterior component and cladding materials not specifically designed by the registered design professional responsible for the design of the structure, pounds per square foot (kN/m^2). Where design for tornado loads is required, the design pressures shown shall be the maximum of wind or tornado pressures.

C. Add Exception 4 to Section 1605.1 of the IBC to read:

4. Where design for tornado loads is required, the alternative allowable stress design load combinations of Section 1605.2 shall not apply when tornado loads govern the design.

D. Change Sections 1607.14 and 1607.14.3 of the IBC to read:

1607.14 Roof loads. The structural supports of roofs and marquees shall be designed to resist wind and, where applicable, tornado, snow, and earthquake loads, in addition to the dead load of construction and the appropriate live loads as prescribed in this section or as set forth in Table 1607.1. The live loads acting on a sloping surface shall be assumed to act vertically on the horizontal projection of that surface.

1607.14.3 Awnings and canopies. Awnings and canopies shall be designed for uniform live loads as required in Table 1607.1 as well as for snow loads and wind and tornado loads as specified in Sections 1608 and 1609.

E. Change Section 1609.3 of the IBC to read:

1609.3 Basic wind speed. The ~~ultimate~~ basic design wind speed, ~~V_{ult}~~ V, in miles per hour (mph), for the determination of the wind loads shall be determined by Figures 1609.3(1), 1609.3(2), 1609.3(3), and 1609.3(4). The ~~ultimate~~ basic design wind speed, ~~V_{ult}~~ V, for use in the design of Risk Category II buildings and structures shall be obtained from Figure 1609.3(1). The ~~ultimate~~ basic design wind speed, ~~V_{ult}~~ V, for use in the design of Risk Categories III and IV buildings and structures shall be obtained from Figures 1609.3(2) and 1609.3(3), respectively. The ~~ultimate~~ basic design wind speed, ~~V_{ult}~~ V, for use in the design of Risk Category I buildings and structures shall be obtained from Figure 1609.3(4). The ~~ultimate~~ basic design wind speeds for localities in special wind regions, near mountainous terrains, and near gorges shall be based on elevation. Areas at 4,000 feet in elevation or higher shall use 142 V mph (~~62.5~~ 62.3 m/s) and areas ~~under~~ lower than 4,000 feet in elevation shall use 116 V mph (~~51~~ 52 m/s). Gorge areas shall be based on the highest recorded speed per locality or in accordance with local jurisdiction requirements determined in accordance with Section 26.5.1 of ASCE 7.

In nonhurricane-prone regions, when the ~~ultimate~~ basic design wind speed, ~~V_{ult}~~ V, is estimated from regional climatic data, the ~~ultimate~~ basic design wind speed, ~~V_{ult}~~ V, shall be determined in accordance with Section 26.5.3 of ASCE 7.

F. Delete Sections 1609.5.1, 1609.5.2, and 1609.5.3 and change Section 1609.5 of the IBC to read:

1609.5 Tornado loads. The design and construction of Risk Category III and IV buildings and other structures located in the tornado-prone region as shown in Figure 1609.5 shall be in accordance with Chapter 32 of ASCE 7, except as modified by this code.

G. Add Figure 1609.5 Tornado-Prone Region to the IBC.

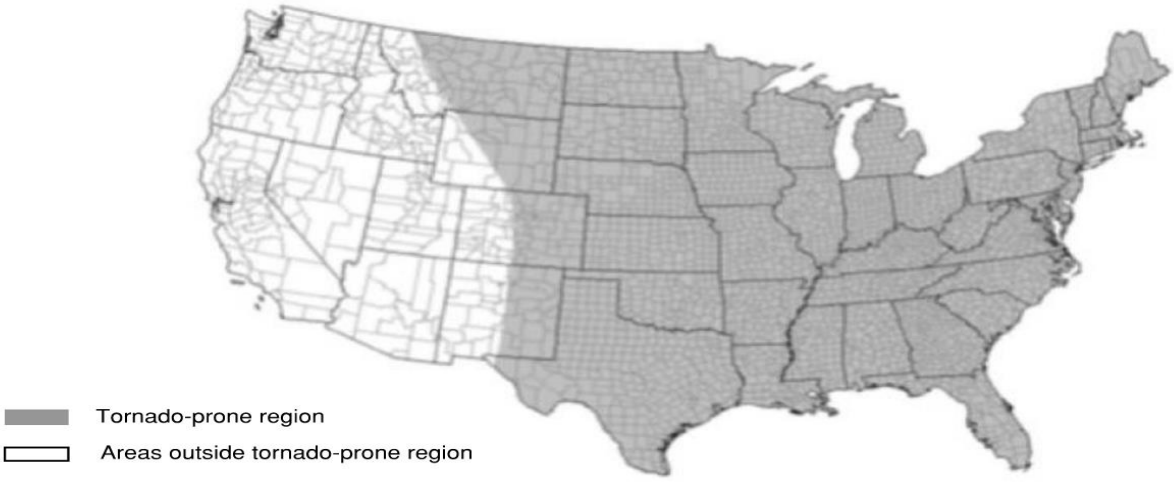


FIGURE 1609.5 TORNADO-PRONE REGION

H. Add Sections 1609.6, 1609.6.1, 1609.6.2, 1609.6.3, 1609.6.3.1, and 1609.6.3.2 to the IBC to read:

1609.6 Roof systems. Roof systems shall be designed and constructed in accordance with Sections 1609.6.1 through 1609.6.3, as applicable.

1609.6.1 Roof deck. The roof deck shall be designed to withstand the greater of wind pressures or tornado pressures determined in accordance with ASCE 7.

1609.6.2 Roof coverings. Roof coverings shall comply with Section 1609.6.1.

Exception: Rigid tile roof coverings that are air permeable and installed over a roof deck complying with Section 1609.6.1 are permitted to be designed in accordance with Section 1609.6.3.

Asphalt shingles installed over a roof deck complying with Section 1609.6.1 shall comply with the wind-resistance requirements of Section 1504.2.

1609.6.3 Rigid tile. Wind and tornado loads on rigid tiles shall comply with Section 1609.6.3.1 or 1609.6.3.2, as applicable.

1609.6.3.1 Wind loads. Wind loads on rigid tile roof coverings shall be determined in accordance with the following equation:

$$M_a = q_h C_L b L L_a [1.0 - GC_p] \quad \text{(Equation 16-18)}$$

For SI:

$$M_a = \frac{q_h C_L b L L_a [1.0 - GC_p]}{1{,}000}$$

where:
b = Exposed width, feet (mm) of the roof tile.

C_L = Lift coefficient. The lift coefficient for concrete and clay tile shall be 0.2 or shall be determined by test in accordance with Section 1504.3.1.

GC_p = Roof pressure coefficient for each applicable roof zone determined from Chapter 30 of ASCE 7. Roof coefficients shall not be adjusted for internal pressure.

L = Length, feet (mm) of the roof tile.

L_a = Moment arm, feet (mm) from the axis of rotation to the point of uplift on the roof tile. The point of uplift shall be taken at 0.76L from the head of the tile and the middle of the exposed width. For roof tiles with nails or screws (with or without a tail clip), the axis of rotation shall be taken as the head of the tile for direct deck application or as the top edge of the batten for battened applications. For roof tiles fastened only by a nail or screw along the side of the tile, the axis of rotation shall be determined by testing. For roof tiles installed with battens and fastened only by a clip near the tail of the tile, the moment arm shall be determined about the top edge of the batten with consideration given for the point of rotation of the tiles based on straight bond or broken bond and the tile profile.

M_a = Aerodynamic uplift moment, feet-pounds (N-mm) acting to raise the tail of the tile.

q_h = Wind velocity pressure, psf (kN/m^2) determined from Section 26.10.2 of ASCE 7.

Concrete and clay roof tiles complying with the following limitations shall be designed to withstand the aerodynamic uplift moment as determined by this section.

1. The roof tiles shall be either loose laid on battens, mechanically fastened, mortar set, or adhesive set.

2. The roof tiles shall be installed on solid sheathing that has been designed as components and cladding.

3. An underlayment shall be installed in accordance with Chapter 15.

4. The tile shall be single lapped interlocking with a minimum head lap of not less than two inches (51 mm).

5. The length of the tile shall be between 1.0 and 1.75 feet (305 mm and 533 mm).

6. The exposed width of the tile shall be between 0.67 and 1.25 feet (204 mm and 381 mm).

7. The maximum thickness of the tail of the tile shall not exceed 1.3 inches (33 mm).

8. Roof tiles using mortar set or adhesive set systems shall have not less than two-thirds of the tile's area free of mortar or adhesive contact.

1609.6.3.2 Tornado loads. Tornado loads on rigid tile roof coverings shall be determined in accordance with Section 1609.6.3.1, replacing q_h with q_{hT} and (GC_p) with K_{vT} (GC_p) in Equation 16-18, where:

q_{hT} = tornado velocity pressure, psf (kN/m^2) determined in accordance with Section 32.10 of ASCE 7.

K_{vT} = tornado pressure coefficient adjustment factor for vertical winds, determined in accordance with Section 32.14 of ASCE 7.

~~B.~~ I. Add Section 1612.1.1 to the IBC to read:

1612.1.1 Elevation of manufactured homes. New or replacement manufactured homes to be located in any flood hazard zone shall be placed in accordance with the applicable elevation requirements of this code.

Exception: Manufactured homes installed on sites in an existing manufactured home park or subdivision shall be permitted to be placed so that the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches (914 mm) above grade in lieu of being elevated at or above the base flood elevation, provided no manufactured home at the same site has sustained flood damage exceeding 50% of the market value of the home before the damage occurred.

J. Change Items 1.1 and 2.1 of Section 1612.4 of the IBC to read:

1.1. The elevation of the lowest floor, including the basement, as required by the lowest floor elevation inspection in Section 113.3.2 and for the final inspection in Section 113.3.3.

2.1. The elevation of the bottom of the lowest horizontal structural member as required by the lowest floor elevation inspection in Section 113.3.2 and for the final inspection in Section 113.3.3.

13VAC5-63-280. Chapter 17 Special inspections and tests.

A. Change Section 1703.1 of the IBC to read:

1703.1 Approved agency. An approved agency responsible for laboratory testing ~~or~~, special inspections, or both~~,~~ must comply with the qualification, certification and experience requirements of ASTM E329 or the alternatives listed ~~herein~~ in this section.

B. Change Section 1703.1.1 of the IBC to read:

1703.1.1 Independence. An approved agency shall be objective and competent. The agency shall also disclose possible conflicts of interest so that objectivity can be confirmed. The special inspector and ~~their~~ the special inspector's agents shall be independent from the person~~,~~ ~~persons~~ or contractor responsible for the physical construction of the project requiring special inspections.

C. Change Section 1703.1.3 of the IBC to read:

1703.1.3 Personnel. An approved agency shall employ experienced personnel educated in conducting, supervising, and evaluating tests ~~or~~, inspections, or both. Upon request by the building official, documentation shall be provided demonstrating the applicable agency's accreditation as noted in ASTM E329 and individuals' resumes indicating pertinent training, certifications, and other qualifications for special inspection personnel associated with the proposed construction requiring special inspections. The building official may prescribe the manner of qualification documentation and frequency of updating information regarding agency or individual inspector approval.

Firms providing special inspection services or individual inspectors seeking approval of alternative certifications ~~or~~, qualifications, or both~~,~~ listed in ASTM E329 may submit documentation demonstrating equivalency. This documentation may include evidence of meeting other recognized standards or alternative certifications to demonstrate that the minimum qualifications, certification, and experience intended by ASTM E329 have been met. The building official may, if satisfied that equivalency has been demonstrated, approve the credentials of the firm or individual.

D. Change Section 1704.2 of the IBC to read:

1704.2 Special inspections. Where application is made for construction as described in this section, the owner shall employ one or more special inspectors to provide inspections and tests during construction on the types of work listed under Section 1705. All individuals or agents performing special inspection functions shall operate under the direct supervision of ~~an~~ a registered design professional (RDP) in responsible charge of special inspection activities, also known as the "special inspector." The special inspector shall ensure that the individuals under ~~their~~ the special inspector's charge are performing only those special inspections or laboratory testing that are consistent with ~~their~~ the individual's knowledge, training, and certification for the specified inspection or laboratory testing.

Exceptions:

1. The building official shall be permitted to waive special inspections and tests.

2. Special inspections and tests are not required for:

2.1. One story buildings under 20 feet (6096 mm) in height ~~which~~ that do not exceed 5,000 square feet (~~565~~ 465 m^2) in building area; or

2.2. Alterations to Group U structures ~~which~~ that do not increase loads in accordance with Sections 603.7.3 and 603.7.4 of the VEBC.

3. Unless otherwise required by the building official, special inspections and tests are not required for occupancies in Group R-3, R-4, or R-5 and occupancies in Group U that are accessory to a residential occupancy including those listed in Section 312.1.

4. Special inspections and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.1.2 or the conventional light-frame construction provisions of Section 2308.

5. The contractor is permitted to employ the approved agencies where the contractor is also the owner.

E. Change Section 1704.2.3 of the IBC to read:

1704.2.3 Statement of special inspections. The permit applicant shall submit a statement of special inspections prepared by the RDP in responsible charge in accordance with Section 111.1. This statement shall be in accordance with Section 1704.3.

Exception:

The statement of special inspections is permitted to be prepared by a qualified person approved by the building official for construction not designed by a registered design professional.

F. Change category ~~"12"~~ "14" of Table 1705.3 of the IBC to read:

Type	Continuous Special Inspection	Periodic Special Inspection	Referenced Standard[a]	IBC Reference
~~12.~~ 14. Inspect formwork for shape, location and dimensions of the concrete member being formed, shoring and reshoring.	--	X	ACI 318: 26.11.1.2(b)	--

G. Delete Sections ~~1705.17, 1705.17.1, and 1705.17.2~~ 1705.18, 1705.18.1, and 1705.18.2 of the IBC.

H. Change ~~Sections~~ Section 1709.5.2 of the IBC to read:

1709.5.2 Exterior windows and door assemblies not provided for in Section 1709.5.1. Exterior window and door assemblies shall be tested in accordance with ASTM E330. Exterior window and door assemblies containing glass shall comply with Section 2403. The design pressure for testing shall be calculated in accordance with Chapter 16. Each assembly shall be tested for 10 seconds at a load equal to 1.5 times the design pressure.

~~I. Add Section 1709.5.2.1 to the IBC to read:~~

~~1709.5.2.1 Garage doors and rolling doors. Garage doors and rolling doors shall be tested in accordance with either ASTM E 330 or ANSI/DASMA 108 and shall meet the pass/fail acceptance criteria of ANSI/DSMA 108. Garage doors and rolling doors shall be labeled with a permanent label identifying the door manufacturer, the door model/series number, the positive and negative design wind pressure rating, the installation drawing reference number, and the applicable test standard.~~

13VAC5-63-295. Chapter 23 Wood.

A. Add Exception 2 to Item 2 of Section 2308.2.3 of the IBC to read:

2. Concrete slab-on-grade live load limited only by allowable soil bearing pressure.

B. Add Exception 4 to Section 2308.2.3 of the IBC to read:

4. Where design for tornado loads is required, tornado loads on the main wind force resisting system and all components and cladding shall not exceed the corresponding wind loads on these same elements.

13VAC5-63-300. Chapter 27 Electrical.

A. Change Section 2701.1 of the IBC to read:

2701.1 Scope. This chapter governs the electrical components, equipment, and systems used in buildings and structures covered by this code. Electrical components, equipment, and systems shall be designed and constructed in accordance with the provisions of this code and NFPA 70.

B. Add Section 2701.1.1 to the IBC to read:

2701.1.1 Changes to NFPA 70. The following changes shall be made to NFPA 70:

1. Change Sections 334.10(2) and 334.10(3) of NFPA 70 to read:

(2) Multifamily dwellings not exceeding four floors above grade and multifamily dwellings of any height permitted to be of Types III, IV, and V construction except in any case as prohibited in 334.12.

(3) Other structures not exceeding four floors above grade and other structures of any height permitted to be of Types III, IV, and V construction except in any case as prohibited in 334.12. In structures exceeding four floors above grade, cables shall be concealed within walls, floors, or ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.

For the purpose of Items 2 and 3 ~~above~~, the first floor of a building shall be that floor that has 50% or more of the exterior wall surface area level with or above finished grade. One additional level that is the first level and not designed for human habitation and used only for vehicle parking, storage, or similar use shall be permitted.

2. Change Section 700.12(F)(2)(6) of NFPA 70 to read:

(6) Where the normal power branch circuits that supply luminaires providing illumination immediately on the inside and outside of exit doors are supplied by the same service or feeder, the remote heads providing emergency illumination for the exterior of an exit door shall be permitted to be supplied by the unit equipment serving the area immediately inside the exit door.

~~3. Change Article 555 of NFPA 70 2017 Edition to NFPA 70 2020 Edition for all code requirements related to Marinas, Boatyards, and Commercial and Noncommercial Docking Facilities.~~

3. Delete Section 210.8(F) in its entirety.

C. Add Section 2701.1.2 to the IBC to read:

2701.1.2 Temporary connection to dwelling units. The building official shall give permission to energize the electrical service equipment of a one-family or two-family dwelling unit when all of the following requirements have been approved:

1. The service wiring and equipment, including the meter socket enclosure, shall be installed and the service wiring terminated.

2. The grounding electrode system shall be installed and terminated.

3. At least one receptacle outlet on a ground fault protected circuit shall be installed and the circuit wiring terminated.

4. Service equipment covers shall be installed.

5. The building roof covering shall be installed.

6. Temporary electrical service equipment shall be suitable for wet locations unless the interior is dry and protected from the weather.

D. Add Section 2701.1.3 to the IBC to read:

2701.1.3 Assisted living facility generator requirements. Generators installed to comply with regulations for assisted living facilities licensed by the Virginia Department of Social Services shall be permitted to be optional standby systems.

E. Delete Section 2702.2.3 of the IBC.

F. Change Sections 2702.2.8 and 2702.2.9 of the IBC to read:

2702.2.8 Group I-2 occupancies. Emergency power shall be provided in accordance with Section 407.11 for Group I-2 occupancies licensed by the Virginia Department of Health as a hospital, nursing, or hospice facility.

2702.2.9 Group I-3 occupancies. Emergency power shall be provided for doors in Group I-3 occupancies in accordance with Section 408.4.2.

13VAC5-63-310. Chapter 28 Mechanical systems.

A. Change Section 2801.1 of the IBC to read:

2801.1 Scope. Mechanical appliances, equipment, and systems shall be constructed and installed in accordance with this chapter, the IMC, and the IFGC. Masonry chimneys, fireplaces, and barbecues shall comply with the IMC and Chapter 21 of this code.

Exception: This code shall not govern the construction of water heaters, boilers, and pressure vessels to the extent ~~which~~ that they are regulated by the Virginia Boiler and Pressure Vessel Regulations (16VAC25-50). However, the building official may require the owner of a structure to submit documentation to substantiate compliance with those regulations.

B. Add Section 2801.1.1 to the IBC to read:

2801.1.1 Required heating in dwelling units. Heating facilities shall be required in every dwelling unit or portion thereof ~~which~~ that is to be rented, leased, or let on terms, either expressed or implied, to furnish heat to the occupants thereof. The heating facilities shall be capable of maintaining the room temperature at 65°F (18°C) during the period from October 15 to May 1 during the hours between 6:30 a.m. and 10:30 p.m. of each day and not less than 60°F (16°C) during other hours when measured at a point three feet (914 mm) above the floor and three feet (914 mm) from the exterior walls. The capability of the heating system shall be based on the outside design temperature required for the locality by this code.

C. Add Section 2801.1.2 to the IBC to read:

2801.1.2 Required heating in nonresidential structures. Heating facilities shall be required in every enclosed occupied space in nonresidential structures. The heating facilities shall be capable of producing sufficient heat during the period from October 1 to May 15 to maintain a temperature of not less than 65°F (18°C) during all working hours. The required room temperature shall be measured at a point three feet (914 mm) above the floor and three feet (914 mm) from the exterior walls.

Processing, storage, and operation areas that require cooling or special temperature conditions and areas in which persons are primarily engaged in vigorous physical activities are exempt from these requirements.

D. Add Section 2801.1.3 to the IBC to read:

2801.1.3 Changes to the IMC. The following changes shall be made to the IMC:

1. Add the following definitions to Section 202 of the IMC:

Refrigerant designation. The unique identifying alphanumeric value or refrigerant number assigned to an individual refrigerant and published in ASHRAE Standard 34.

~~1.~~ 2. Change Section 401.2 of the IMC to read:

401.2 Ventilation required. Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403. Group R dwelling units shall be ventilated by mechanical means in accordance with Section 403. Ambulatory care facilities and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407.

~~2.~~ 3. Change Section 403.3.1.1 of the IMC to read:

403.3.1.1 Outdoor airflow rate. Ventilation systems shall be designed to have the capacity to supply the minimum outdoor airflow rate determined in accordance with this section. In each occupiable space, the ventilation system shall be designed to deliver the required rate of outdoor airflow to the breathing zone. The occupant load utilized for design of the ventilation system shall not be less than the number determined from the estimated maximum occupant load rate indicated in Table 403.3.1.1. Ventilation rates for occupancies not represented in Table 403.3.1.1 shall be those for a listed occupancy classification that is most similar in terms of occupant

density, activities, and building construction; or shall be determined by an approved engineering analysis. The ventilation system shall be designed to supply the required rate of ventilation air continuously during the period the building is occupied, except as otherwise stated in other provisions of the code.

With the exception of smoking lounges and other designated areas where smoking is permitted, the ventilation rates in Table 403.3.1.1 are based on the absence of smoking in occupiable spaces.

Exception: The occupant load is not required to be determined based on the estimated maximum occupant load rate indicated in Table 403.3.1.1 where approved statistical data document the accuracy of an alternate anticipated occupant density.

~~3.~~ 4. Add the following rows to Table 403.3.1.1 of the IMC to read:

OCCUPANCY CLASSIFICATION	Occupant Density #/1000 ft^2 [a]	People Outdoor Airflow Rate in Breathing Zone, R_p cfm/person	Area Outdoor Airflow Rate in Breathing Zone, R_a cfm/ft^{2a}	Exhaust Airflow Rate Cfm/ft^{2a}
Food and beverage service				
Bars or cocktail lounges designated as an area where smoking is permitted[b]	100	30	--	--
Cafeteria or fast food designated as an area where smoking is permitted[b]	100	20	--	--
Dining rooms designated as an area where smoking is permitted[b]	70	20	--	--
Public spaces				
Lounges designated as an area where smoking is permitted[b]	100	30	--	--
Medical procedure rooms[I]	20	15	-	-
Patient rooms[I]	10	25	-	-
Physical therapy rooms[I]	20	15	-	-
i. For spaces that are ~~not~~ located in ~~an ambulatory care facility or~~ clinic, outpatient facilities as defined in Chapter 2 of the VCC.				

5. Change Item 6 of Section 410.2 of the IMC to read (Items 1 through 5 and Item 7 remain):

6. Means shall be provided downstream of the MP regulator for the connection of a pressure measuring instrument and shall be positioned to allow connection of a pressure measuring instrument. Such means shall be permitted to be a dedicated test port on a regulator, gas control, or manifold or a plugged tee fitting or plugged manifold port.

~~4.~~ 6. Change Section ~~504.8.2~~ 504.9.2 of the IMC to read:

~~504.8.2~~ 504.9.2 Duct installation. Exhaust ducts shall be supported at ~~4 foot~~ four-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

~~5.~~ 7. Change ~~item~~ Item 2 of Section 504.10 to read:

2. Dampers shall be prohibited in the exhaust duct. Penetrations of the shaft and ductwork shall be protected in accordance with Section 607.5.5, Exception 1.

~~6.~~ 8. Change Exception 1 of Section 505.3 of the IMC to read:

1. In Group R buildings, where installed in accordance with the manufacturer's installation instructions and where mechanical or natural ventilation is otherwise provided in

accordance with Chapter 4, listed and labeled ductless range hoods shall not be required to discharge to the outdoors.

~~7.~~ 9. Change ~~item~~ Item 2 in Section 505.5 to read:

2. Penetrations of the shaft and ductwork shall be protected in accordance with Section 607.5.5.

~~8.~~ 10. Change Section 505.6 of the IMC to read:

505.6 Other than Group R. In other than Group R occupancies, where electric domestic cooking appliances are utilized for domestic purposes, domestic range hoods shall be permitted for such appliances. Hoods and exhaust systems for such electric domestic cooking appliances shall be in accordance with Sections 505.2 and 505.4. In other than Group R occupancies, where fuel-fired domestic cooking appliances are utilized for domestic purposes, a Type I or Type II hood shall be provided as required for the type of appliances and processes in accordance with Section 507.1.

~~9.~~ 11. Change Section 506.5 of the IMC to read:

506.5 Exhaust equipment. Exhaust equipment, including fans and grease reservoirs, shall comply with Sections 506.5.1 through 506.5.6 and shall be of an approved design or shall be listed for the application.

~~10. Change Section 506.5.2, including Items 1, 3, and 5 of the IMC to read: (Items not shown remain the same.)~~

~~506.5.2 Pollution control units. The installation of pollution control units shall be in accordance with all of the following:~~

~~1. Pollution control units shall be listed and labeled in accordance with UL 8782.~~

~~3. Bracing and supports for pollution control units shall be of noncombustible material securely attached to the structure and designed to carry gravity and seismic loads within the stress limitations of the International Building Code.~~

~~5. Clearances shall be maintained between the pollution control unit and combustible material in accordance with the listing.~~

~~11.~~ 12. Change Section ~~510.7.1.1~~ 510.6.1.1 of the IMC to read:

~~510.7.1.1~~ 510.6.1.1 Shaft penetrations. Hazardous exhaust ducts that penetrate fire-resistance-rated shafts shall comply with Section 713.11 of the International Building Code.

~~12.~~ 13. Change Section 607.5.5 of the IMC to read:

607.5.5 Shaft enclosures. Shaft enclosures that are permitted to be penetrated by ducts and air transfer openings shall be protected with approved fire and smoke dampers installed in accordance with their listing.

Exceptions:

1. Fire and smoke dampers are not required where steel exhaust subducts extend at least 22 inches (559 mm) vertically in exhaust shafts, provided there is a continuous airflow upward to the outside.

2. Fire dampers are not required where penetrations are tested in accordance with ASTM E119 as part of the fire-resistance-rated assembly.

3. Fire and smoke dampers are not required where ducts are used as part of an approved smoke control system in accordance with Section 909 of the International Building Code.

4. Fire and smoke dampers are not required where the penetrations are in parking garage exhaust or supply shafts that are separated from other building shafts by not less than two-hour fire-resistance-rated construction.

5. Smoke dampers are not required where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the International Building Code.

~~13.~~ 14. Add Section 607.6.2.2 to the IMC to read:

607.6.2.2 Equipment shutdown. Where ceiling radiation dampers are listed as static dampers, the HVAC equipment shall be effectively shut down to stop the airflow prior to the damper closing using one of the following methods:

1. A duct detector installed in the return duct.

2. An area smoke detector interlocked with the HVAC equipment.

3. A listed heat sensor installed in the return duct.

15. Change Table 1101.2 to read:

EQUIPMENT	STANDARDS
Refrigeration fittings, including press-connect, flared and threaded	UL 109 and UL 207
Air-conditioning equipment and heat pump equipment	UL 1995 or UL/CSA 60335-2-40
Packaged terminal air conditioners and heat pumps	UL 484 or UL/CSA 60335-2-40
Split-system air conditioners and heat pumps	UL 1995 or UL/CSA 60335-2-40
Dehumidifiers	UL 474 or UL/CSA 60335-2-40
Air/water cooled condensers	UL 1995 or UL/CSA 60335-2-40 or UL/CSA 60335-2-89
Refrigeration equipment	UL 1995 or UL/CSA 60335-2-89

Unit coolers	UL 412 or UL/CSA 60335-2-89
Commercial refrigerators, freezers, beverage coolers, and walk-in coolers	UL 471 or UL/CSA 60335-2-89
Refrigerating units and walk-in coolers	UL 427 or UL 60335-2-89
Refrigeration condensing units	UL 1995 or UL/CSA 60335-2-89
Automatic commercial ice machines	UL 563 or UL/CSA 60335-2-89
Refrigerant-containing components and accessories	UL 207

16. Add Section 1101.2.1 to read:

1101.2.1 Group A2L, A2, A3, and B1 high probability equipment. High probability equipment using Group A2L, A2, A3, or B1 refrigerant shall comply with UL 484, UL/CSA 60335-2-40, or UL/CSA 60335-2-89.

17. Change Sections 1101.7 and 1102.2.1 to read:

1101.7 Changing refrigerant. Changes of refrigerant in an existing system to a refrigerant with a different refrigerant designation shall only be allowed where in accordance with the following:

1. The owner or the owner's authorized agent shall be notified prior to making a change of refrigerant, and the change of refrigerant shall not be made where the owner objects to the change.

2. The change in refrigerant shall be in accordance with one of the following.

2.1 Written instructions of the original equipment manufacturer.

2.2 An evaluation of the system by a registered design professional or by an approved agency that validates safety and suitability of the replacement refrigerant.

2.3 Approved by the code official.

3. Where the replacement refrigerant is classified into the same safety group, requirements that were applicable to the existing system shall continue to apply.

4. Where the replacement refrigerant is classified into a different safety group, the system shall comply with the requirements of this standard for a new installation, and the change of refrigerant shall require code official approval.

1102.2.1 Mixing. Refrigerants with different refrigerant designations shall only be mixed in a system in accordance with both of the following:

1. The addition of a second refrigerant is allowed by the equipment manufacturer and is in accordance with the manufacturer's written instructions.

2. The resulting mixture does not change the refrigerant safety group.

18. Change Table 1103.1 of the IMC to read (portions of table not shown remain):

TABLE 1103.1 REFRIGERANT CLASSIFICATION, AMOUNT AND OEL

Chemical Refrigerant	Formula	Chemical Name of Blend	Refrigerant Safety Group Classification	AMOUNT OF REFRIGERANT PER OCCUPIED SPACE						
				RCL			LFL			OEL[d]
				lb/MCf	ppm	g/m^3	lb/MCf	ppm	g/m^3	ppm
R-11[c]	CCl_3F	trichlorofluoromethane	A1	0.39	1,100	6.1				1,000
R-12[c]	CCl_2F_2	dichlorodifluoromethane	A1	5.6	18,000	90				1,000
R-13[c]	$CClF_3$	chlorotrifluoromethane	A1	—	—	—				1,000
R-13B1[c]	$CBrF_3$	bromotrifluoromethane	A1	—	—	—				1,000
R-13I1	CF_3I	trifluoroiodomethane	A1	1.0	2,000	16				500
R-31	CH_2ClF	chlorofluoromethane	[c]	[c]	[c]	[c]				[c]
R-32	CH_2F_2	difluoromethane (methylene fluoride)	A2L	4.8	36,000	77	19.1	144,000	306	1,000

R-41	CH3F	fluoromethane (methyl fluoride)	-	-	-	-				-
R-50	CH_4	methane	A3	—	—	—		50,000		1,000
R-113[c]	CCl_2FCClF_2	1,1,2-trichloro-1,2,2-trifluoroethane	A1	1.2	2,600	20				1,000
R-114[c]	$CClF_2CClF_2$	1,2-dichloro-1,1,2,2-tetrafluoroethane	A1	8.7	20,000	140				1,000
R-141b	CH_3CCl_2F	1,1-dichloro-1-fluoroethane	—	0.78	2,600	12	17.8	60,000	287	500
R-142b	CH_3CClF_2	1-chloro-1,1-difluoroethane	A2	5.1	20,000	82	20.4	80,000	329	1,000
R-143a	CH_3CF_3	1,1,1-trifluoroethane	A2L	4.4	21,000	70	17.5	82,000	282	1,000
R-152a	CH_3CHF_2	1,1-difluoroethane	A2	2.0	12,000	32	8.1	48,000	130	1,000
R-170	CH_3CH_3	ethane	A3	0.54	7,000	8.6	2.4	31,000	38	1,000
R-E170	CH_3OCH_3	Methoxymethane (dimethyl ether)	A3	1.0	8,500	16	4.0	34,000	64	1,000
R-290	$CH_3CH_2CH_3$	propane	A3	0.59	5,300	9.5	2.4	21,000	38	1,000
R-C318	$(CF_2)_4$-	octafluorocyclobutane	A1	41	80,000	650				1,000
R-400A[c]	zeotrope	R-12/114 (50.0/50.0)	A1	10	28,000	160				1,000
R-400B[c]	zeotrope	R-12/114 (60.0/40.0)	A1	11	30,000	170				1,000
R-403B	zeotrope	R-290/22/218 (5.0/56.0/39.0)	A1	18	68,000	290				1,000
R-406A	zeotrope	R-22/600a/142b (55.0/4.0/41.0)	A2	4.7	21,000	75	18.8	82,000	301.9	1,000
R407I	zeotrope	R-32/125/134a (19.5/8.5/72.0)	A1	16	71,100	250				1,000
R-408A	zeotrope	R-125/143a/22 (7.0/46.0/47.0)	A1	21	94,000	330				1,000
R-411A	zeotrope	R-127/22/152a (1.5/87.5/11.0)	A2	2.9	14,000	46	11.6	55,000	185.6	970
R-411B	zeotrope	R-1270/22/152a (3.0/94.0/3.0)	A2	2.8	13,000	45	14.8	70,000	238.3	940
R-412A	zeotrope	R-22/218/142b (70.0/5.0/25.0)	A2	5.1	22,000	82	20.5	87,000	328.6	1,000
R-413A	zeotrope	R-218/134a/600a (9.0/88.0/3.0)	A2	5.8	22,000	93	23.4	88,000	374.9	1,000
R-414B	zeotrope	R-22/124/600a/142b (50.0/39.0/1.5/9.5)	A1	6.0	23,000	96				1,000
R-417A	zeotrope	R-125/134a/600 (46.6/50.0/3.4)	A1	3.5	13,000	55				1,000
R-417B	zeotrope	R-125/134a/600 (79.0/18.3/2.7)	A1	4.3	15,000	69				1,000
R-418A	zeotrope	R-290/22/152a (1.5/96.0/2.5)	A2	4.8	22,000	77	19.2	89,000	308.4	1,000
R-419A	zeotrope	R-125/134a/E170 (77.0/19.0/4.0)	A2	4.2	15,000	67	16.7	60,000	268.6	1,000
R-419B	zeotrope	R-125/134a/E170 (48.5/48.0/3.5)	A2	4.6	17,000	74	18.5	69,000	297.3	1,000

R-420A	zeotrope	R-134a/142b (88.0/12.0)	A1	12	44,000	180				1,000
R-423A	zeotrope	R-134a/227ea (52.5/47.5)	A1	19	59,000	300				1,000
R-424A	zeotrope	R-125/134a/600a/600/601a(50.5/47.0/0.9/1.0/0.6)	A1	6.2	23,000	100				990
R-428A	zeotrope	R-125/143a/290/600a (77.5/20.0/0.6/1.9)	A1	23	84,000	370				1,000
R-429A	zeotrope	R-E170/152a/600a (60.0/10.0/30.0)	A3	0.81	6,300	13	3.2	25,000	83.8	1,000
R-430A	zeotrope	R-152a/600a (76.0/24.0)	A3	1.3	8,000	21	5.2	32,000	44.0	1,000
R-431A	zeotrope	R-290/152a (71.0/29.0)	A3	0.68	5,500	11	2.7	22,000	38.6	1,000
R-432A	zeotrope	R-1270/E170 (80.0/20.0)	A3	0.13	1,200	2.1	2.4	22,000	39.2	550
R-433A	zeotrope	R-1270/290 (30.0/70.0)	A3	0.34	3,100	5.5	2.4	20,000	32.4	760
R-433B	zeotrope	R-1270/290 (5.0-95.0)	A3	0.39	3,500	6.3	2.0	18,000	32.1	950
R-433C	zeotrope	R-1270/290 (25.0-75.0)	A3	0.41	3,700	6.5	2.0	18,000	83.8	790
R-435A	zeotrope	R-E170/152a (80.0/20.0)	A3	1.1	8,500	17	4.3	34,000	68.2	1,000
R-436A	zeotrope	R-290/600a (56.0/44.0)	A3	0.50	4,000	8.1	2.0	16,000	32.2	1,000
R-436B	zeotrope	R-290/600a (52.0/48.0)	A3	0.51	4,000	8.2	2.0	16,000	32.7	1,000
R-437A	zeotrope	R-125/134a/600/601 (19.5/78.5/1.4/0.6)	A1	5.1	19,000	82				990
R-439A	zeotrope	R-32/125/600a (50.0/47.0/3.0)	A2	4.7	26,000	76	18.9	104,000	303.3	1,000
R-440A	zeotrope	R-290/134a/152a (0.6/1.6/97.8)	A2	1.9	12,000	31	7.8	46,000	124.7	1,000
R-441A	zeotrope	R-170/290/600a/600 (3.1/54.8/6.0/36.1)	A3	0.39	3,200	6.3	2.0	16,000	31.7	1,000
R-443A	zeotrope	R-1270/290/600a (55.0/40.0/5.0)	A3	0.19	1,700	3.1	2.2	20,000	35.6	640
R-444A	zeotrope	R-32/152a/1234ze(E) (12.0/5.0/83.0)	A2L	5.1	21,000	81	19.9	82,000	324.8	850
R-444B	zeotrope	R-32/152a/1234ze(E) (41.5/10.0/48.5)	A2L	4.3	23,000	69	17.3	93,000	277.3	930
R-445A	zeotrope	R-744/134a/1234ze(E) (6.0/9.0/85.0)	A2L	4.2	16,000	67	21.7	63,000	347.4	930
R-446A	zeotrope	R-32/1234ze(E)/600 (68.0/29.0/3.0)	A2L	2.5	16,000	39	13.5	62,000	217.4	960
R-447A	zeotrope	R-32/125/1234ze(E) (68.0/3.5/28.5)	A2L	2.6	16,000	42	18.9	65,000	303.5	960
R-447B	zeotrope	R-32/125/1234ze(E) (68.0/8.0/24.0)	A2L	23	16,000	42	20.6	121,000	312.7	970
R-448A	zeotrope	R-32/125/1234yf/134a/1234ze (E)(26.0/26.0/20.0/21.0/7.0)	A1	24	110,000	390				860

R-449A	zeotrope	R-32/125/1234yf/134a (24.3/24.7/25.3/25.7)	A1	23	100,000	370				840
R-451A	zeotrope	R-1234yf/134a (89.8/10.2)	A2L	5.3	18,000	81	20.3	70,000	326.6	530
R-451B	zeotrope	R-1234yf/134a (88.8/11.2)	A2L	5.3	18,000	81	20.3	70,000	326.6	530
R-452A	zeotrope	R-32/125/1234yf (11.0/59.0/30.0)	A1	27	100,000	440				790
R-452B	zeotrope	R-32/125/1234yf (67.0/7.0/26.0)	A2L	4.8	30,000	77	19.3	119,000	310.5	870
R-452C	zeotrope	R-32/125/1234yf (12.5/61.0/26.5)	A1	27	100,000	430				810
R-454A	zeotrope	R-32/1234yf (35.0/65.0)	A2L	3.2	16,000	52	18.3	63,000	293.9	690
R-454B	zeotrope	R-32/1234yf (68.9/31.1)	A2L	3.1	19,000	49	22.0	77,000	352.6	850
R-454C	zeotrope	R-32/1234yf (21.5/78.5)	A2L	4.4	19,000	71	18.0	62,000	289.5	620
R-455A	zeotrope	R-744/32/1234yf (3.0/21.5/75.5)	A2L	4.9	22,000	79	26.9	118,000	432.1	650
R-457A	zeotrope	R-32/1234yf/152a (18.0/70.0/12.0)	A2L	3.4	15,000	54	13.5	60,000	216.3	650
R-457B	zeotrope	R-32/1234yf/152a (35.0/55.0/10.0)	A2L	3.7	19,000	59	14.9	76,000	239	730
R-459A	zeotrope	R-32/1234yf/1234ze (E) (68.0/26.0/6.0)	A2L	4.3	27,000	69	17.4	107,000	278.7	870
R-459B	zeotrope	R-32/1234yf/1234ze (E) (21.0/69.0/10.0)	A2L	30	25,000	92	23.3	99,000	373.5	640
R-460A	zeotrope	R-32/125/134a/1234ze (E)(12.0/52.0/14.0 /22.0)	A1	24	92,000	380				950
R-460C	zeotrope	R-32/125/134a/1234ze (E)(2.5/52.5/46.0 /49.0)	A1	20	73,000	310				900
R-462A	zeotrope	R-32/125/143a/134a/ 600(9.0/42.0/2.0/ 44.0/3.0)	A2	3.9	16,000	62	16.6	105,000	265.8	1,000
R-464A	zeotrope	R-32/125/1234ze(E) /227ea(27.0/27.0/ 40.0/6.0)	A1	27	120,000	430				930
R-465A	zeotrope	R-32/290/1234yf (21.0/7.9/71.1)	A2	2.5	12,000	40	10.0	98,000	160.9	660
R-466A	zeotrope	R-32/125/13I1 (49.0/11.5/39.5)	A1	6.2	30,000	99				860
R-467A	zeotrope	R-32/125/134a/600a (22.0/5.0/72.4/0.6)	A2L	6.7	31,000	110				1,000
R-468A	zeotrope	R-1132a/32/1234yf (3.5/21.5/75.0)	A2L	4.1	16,00	66				610
R-469A	zeotrope	R-744/32/125 (35.0/32.5/32.5)	A1	8	53,000					1,600
R-470A	zeotrope	R-744/32/125/134a/ 1234ze(E)/227ea(10.0/17 .0/19.0/7.0/44.0/3.0)	A1	17	77,00	270				1,100

R-470B	zeotrope	R-744/32/125/134a/1234ze(E)/227ea(10.0/11.5/11.5/3.0/57.0/7.0)	A1	16	72,000	270				1,100
R-471A	zeotrope	R-1234ze(E)/227ea/1336mzz(E) (78.7/4.3/17.0)	A1	9.7	31,000	160				710
R-472A	zeotrope	R-744/32/134a (69.0/12.0/19.0)	A1	4.5	35,000	72				2,700
R-500[d]	azeotrope	R-12/152a (73.8/26.2)	A1	7.4	29,000	120				1,000
R-501	azeotrope	R-22/12 (75.0/25.0)	A1	13	54,000	210				1,000
R-502[d]	azeotrope	R-22/115 (48.8/51.2)	A1	21	73,000	330				1,000
R-503[d]	azeotrope	R-23/13 (40.1/59.9)	—	—	—	—				1,000
R-504[e]	azeotrope	R-32/115 (48.2/51.8)	—	28	140,000	450				1,000
R-507A	azeotrope	R-125/143a (50.0/50.0)	A1	32	130,000	510				1,000
R-509A	azeotrope	R-22/218 (44.0/56.0)	A1	24	75,000	380				1,000
R-510A	azeotrope	R-E170/600a (88.0/12.0)	A3	0.87	7,300	14	3.5	29,000	56.1	1,000
R-511A	azeotrope	R-290/E170 (95.0/5.0)	A3	0.59	5,300	9.5	2.4	21,000	38.0	1,000
R-512A	azeotrope	R-134a/152a (5.0/95.0)	A2	1.9	11,000	31	7.7	45,000	123.9	1,000
R-515A	azeotrope	R-1234ze(E)/227ea (88.0/12.0)	A1	19	63,000	300				810
R-515B	azeotrope	R-1234ze(E)/227ea (91.1/8.9)	A1	18	61,000	290				810
R-516A	azeotrope	R-1234yf/134a/152a (77.5/8.5/14.0)	A2	3.2	13,000	52	13.1	50,000	210.1	590
R-600	$CH_3CH_2CH_2CH_3$	butane	A3	0.15	1,000	2.4	3.0	20,000	48	1,000
R-600a	$CH(CH_3)_2CH_3$	2-methylpropane (isobutane)	A3	0.59	4,000	9.6	2.4	16,000	38	1,000
R-601	$CH_3CH_2CH_2CH_2CH_3$	pentane	A3	0.18	1,000	2.9	2.2	12,000	35	600
R-601a	$(CH_3)_2CHCH_2CH_3$	2-methylbutane (isopentane)	A3	0.18	1,000	2.9	2.4	13,000	38	600
R-717	NH_3	ammonia	B2L	0.014	320	0.22	7.2	167,000	116	25
R-1130(E)	CHCl=CHCl	trans-1,2-dichloroethene	B2	0.25	1,000	4	16	65,000	258	200
R-1132a	$CF_2=CH_2$	1,1-difluoroethylene	A2	2.0	13,000	33	8.1	50,000	131	500
R-1150	$CH_2=CH_2$	ethene (ethylene)	A3	—	—	—	2.2	31,000	36	200
R-1224yd(Z)	$CF_3CF=CHCl$	(Z)-1-chloro-2,3,3,3-tetrafluoroethylene	A1	23	60,000	370				1,000
R-1234yf	$CF_3CF=CH_2$	2,3,3,3-tetrafluoro-1-propene	A2L	4.7	16,000	75	18.0	62,000	289	500

R-1234ze(E)	$CF_3CH=CHF$	trans-1,3,3,3-tetrafluoro-1-propene	A2L	4.7	16,000	76	18.8	65,000	303	800
R-1270	$CH_3CH=CH_2$	Propene (propylene)	A3	0.1	1,000	1.7				500
R-1336mzz(E)	$CF_3CHCHCF_3$	trans-1,1,1,4,4,4-hexaflouro-2-butene	A1	3.0	7,200	48				400
R-1336mzz(Z)	$CF_3CHCHCF_3$	cis-1,1,1,4,4,4-hexaflouro-2-butene	A1	5.2	13,000	84				500

a. Degrees of hazard are for health, fire, and reactivity, respectively, in accordance with NFPA 704.

b. Reduction to 1-0-0 is allowed if analysis satisfactory to the code official shows that the maximum concentration for a rupture or full loss of refrigerant charge would not exceed the IDLH, considering both the refrigerant quantity and room volume.

c. Class 1 ozone depleting substance; prohibited for new installations.

d. Occupational Exposure Limit based on the OSHA PEL, ACGIH TLV-TWA, the TERA WEEL or consistent value on a time-weighed average (TWA) basis (unless noted C for ceiling) for an 8 hr/d and 40 hr/wk.

19. Change Section 1104.3.1 of the IMC to read:

1104.3.1 Air conditioning for human comfort. High probability systems used for human comfort shall use Group A1 or A2L refrigerant.

Exceptions:

1. Listed equipment for residential occupancies containing a maximum of 6.6 pounds (3 kg) of refrigerant.

2. Listed equipment for commercial occupancies containing a maximum of 22 pounds (10 kg) of refrigerant.

3. Industrial occupancies.

20. Change Section 1104.3.2 of the IMC to read:

1104.3.2 Group A3 and B3 refrigerants. Group A3 and B3 refrigerants shall not be used except where approved.

Exceptions: This section does not apply to:

1. Laboratories where the floor area per occupant is not less than 100 square feet (9.3 m^2).

2. Listed self-contained systems having a maximum of 0.331 pounds (150 g) of Group A3 refrigerant.

3. Self-contained systems listed per UL 60335-2-89 having a maximum of 1.1 pounds (500g) of Group A3 refrigerant.

4. Industrial occupancies.

5. Equipment listed for and used in residential occupancies containing a maximum of 6.6 pounds (3 kg) of Group A2 or B2 refrigerant.

6. Equipment listed for and used in commercial occupancies containing a maximum of 22 pounds (10 kg) of Group A2 or B2 refrigerant.

21. Delete Table 1104.3.2 of the IMC.

22. Delete the exception to Section 1106.3 of the IMC and change Section 1106.3 of the IMC to read:

1106.3 Class 2 and Class 3 refrigerants. Where refrigerants of Groups A2, A3, B2, and B3 are used, the machinery room shall conform to the Class I, Division 2, hazardous location classification requirements of NFPA 70.

23. Delete the exception to Section 1106.4 and change Section 1106.4 of the IMC to read:

1106.4 Group A2L and B2L refrigerant. Machinery rooms for Group A2L and Group B2L refrigerant shall comply with Sections 1106.4.1 through 1106.4.3.

24. Change Section 1106.4.1 to the IMC to read:

1106.4.1 Elevated temperature. Open flame-producing devices or continuously operating hot surfaces over 1290 °F (700 °C) shall not be permanently installed in the room.

25. Change Section 1106.4.2 of the IMC to read:

1106.4.2 Refrigerant detector. In addition to the requirements of Section 1105.3, refrigerant detectors shall signal an alarm and activate the ventilation system in accordance with the response time specified in Table 1106.4.2.

26. Replace Table 1106.4.2 of the IMC with the following:

Table 1106.4.2 GROUP A2L and B2L DETECTOR ACTIVATION

Activation Level	Maximum Response Time (seconds)	ASHRAE 15 Ventilation Level	Alarm Reset	Alarm Type
Less than or equal to the OEL in Table 1103.1	300	1	Automatic	Trouble
Less than or equal to the refrigerant concentration level in Table 1103.1	15	2	Manual	Emergency

27. Change Section 1106.4.3 of the IMC to read:

1106.4.3 Mechanical Ventilation. The machinery room shall have a mechanical ventilation system complying with ASHRAE 15.

28. Add the following standards to the list of referenced standards in Chapter 15 of the IMC:

Standard Reference Number	Title
UL 484-2019	Standard for Room Air Conditioners
UL/CSA 60335-2-40-2019	Household and Similar Electrical Appliances-Safety-Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers
UL/CSA 60335-2-89-2021	Household and Similar Electrical Appliances—Safety—Part 2-89: Particular Requirements for Commercial Refrigerating Appliances and Ice-Makers with an Incorporated or Remote Refrigerant Unit or Motor-Compressor

29. Delete the following standards from the list of referenced standards in Chapter 15 of the IMC:

Standard Reference Number	Title
UL 484-2014	Standard for Room Air Conditioners
UL/CSA 60335-2-40-2017	Household and Similar Electrical Appliances-Safety-Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers
UL/CSA 60335-2-89-2017	Household and Similar Electrical Appliances—Safety—Part 2-89: Particular Requirements for Commercial Refrigerating Appliances and Ice-Makers with an Incorporated or Remote Refrigerant Unit or Motor-Compressor
109—97	Tube Fittings for Flammable and Combustible Fluids, Refrigeration Service and Marine Use
207—2009	Refrigerant-containing Components and Accessories, Nonelectrical - with revisions through June 2014

E. Add Section 2801.1.4 to the IBC to read:

2801.1.4 Changes to the IFGC. The following changes shall be made to the IFGC:

1. Change Section 301.1 of the IFGC to read:

301.1 Scope. This code shall apply to the installation of fuel gas piping systems, fuel gas utilization equipment, and related accessories as follows:

1. Coverage of piping systems shall extend from the point of delivery to the connections with gas utilization equipment. (See "point of delivery.")

2. Systems with an operating pressure of 125 psig (862 kPa gauge) or less.

Piping systems for gas-air mixtures within the flammable range with an operating pressure of 10 psig (69 kPa gauge) or less.

LP-Gas piping systems with an operating pressure of 20 psig (140 kPa gauge) or less.

3. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing, and inspection.

4. Requirements for gas utilization equipment and related accessories shall include installation, combustion, and ventilation air and venting.

This code shall not apply to the following:

1. Portable LP-Gas equipment of all types that are not connected to a fixed fuel piping system.

2. Installation of farm equipment such as brooders, dehydrators, dryers, and irrigation equipment.

3. Raw material (feedstock) applications except for piping to special atmosphere generators.

4. Oxygen-fuel gas cutting and welding systems.

5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen, and nitrogen.

6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms, and natural gas processing plants.

7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by chemical reactions or used in chemical reactions.

8. LP-Gas installations at utility gas plants.

9. Liquefied natural gas (LNG) installations.

10. Fuel gas piping in power and atomic energy plants.

11. Proprietary items of equipment, apparatus, or instruments such as gas generating sets, compressors, and calorimeters.

12. LP-Gas equipment for vaporization, gas mixing, and gas manufacturing.

13. Temporary LP-Gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.

14. Installation of LP-Gas systems for railroad switch heating.

15. Installation of LP-Gas and compressed natural gas (CNG) systems on vehicles.

16. Except as provided in Section 401.1.1, gas piping, meters, gas pressure regulators, and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-Gas.

17. Building design and construction, except as specified herein.

~~2. Change Sections 310.1 and 310.2 of the IFGC to read:~~

~~310.1 Pipe and tubing. Each above-group portion of a gas piping system that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance. Corrugated stainless steel tubing (CSST) piping systems listed with an arc resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26 shall comply with this section. Where any CSST segments of a piping system are not listed with an arc resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26, Section 310.2 shall apply.~~

~~310.2 CSST without arc resistant jacket or coating system. CSST gas piping systems and piping systems containing one or more segments of CSST not listed with an arc resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26 shall be bonded to the electrical service grounding electrode system or, where provided, the lightning protection electrode system and shall comply with Sections 310.2.1 through 310.2.5.~~

2. Change Section 301.3 of the IFGC to read:

301.3 Listed and labeled. Appliances regulated by this code shall be listed and labeled for the application in which they are used unless otherwise approved in accordance with Section 112. The approval of unlisted appliances in accordance with Section 112 shall be based on approved engineering evaluation.

3. Add Section ~~404.11.6~~ 404.11.5 to the IFGC to read:

~~404.11.6~~ 404.11.5 Coating application. Joints in gas piping systems shall not be coated prior to testing and approval.

4. Change Section ~~614.8.2~~ 614.9.2 of the IFGC to read:

~~614.8.2~~ 614.9.2 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

5. ~~Change~~ Add the following standards to the list of referenced ~~standard~~ standards in Chapter 8 of the IFGC:

Standard Reference Number	Title	~~Referenced in Code Section Number~~
ANSI LC1/CSA 6.26-18	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)	~~310.1, 310.1.1, 403.5.4~~
~~UL8782-17~~	~~Outline of Investigation for Pollution Control Units for Commercial Cooking~~	~~506.5.2~~

6. Delete the following standards from the list of referenced standards in Chapter 8 of the IFGC:

Standard Reference Number	Title
ANSI LC1/CSA 6.26-16	Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)

13VAC5-63-320. Chapter 29 Plumbing systems.

A. Change Section 2901.1 of the IBC to read:

2901.1 Scope. The provisions of this chapter and the IPC shall govern the design and installation of all plumbing systems and equipment, except that as provided for in Section 103.5 for functional design, water supply sources and sewage disposal systems are regulated and approved by the Virginia Department of Health and the Virginia Department of Environmental Quality. The approval of pumping and electrical equipment associated with such water supply sources and sewage disposal systems shall, however, be the responsibility of the building official.

Note: See also the Memorandum of Agreement in the "Related Laws Package," which is available from DHCD.

B. Add Section 2901.1.1 to the IBC to read:

2901.1.1 Changes to the IPC. The following changes shall be made to the IPC:

1. Add the following definitions to the IPC to read:

Nonpotable fixtures and outlets. Fixtures and outlets that are not dependent on potable water for the safe operation to perform their intended use. Such fixtures and outlets may include water closets, urinals, irrigation, mechanical equipment, and hose connections to perform operations, such as vehicle washing and lawn maintenance.

Nonpotable water systems. Water systems for the collection, treatment, storage, distribution, and use or reuse of nonpotable water. Nonpotable systems include reclaimed water, rainwater, and gray water systems.

Service sink. A general purpose sink exclusively intended to be used for facilitating the cleaning of a building or tenant space.

Stormwater. Precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage.

2. Change the following definitions in the IPC to read:

Rainwater. Natural precipitation, including snow melt, from roof surfaces only.

Reclaimed water. Reclaimed water means water resulting from the treatment of domestic, municipal, or industrial wastewater that is suitable for a water reuse that would not otherwise occur. Specifically excluded from this definition is "gray water."

3. Change the exception to Section 301.3 of the IPC to read:

Exception: Bathtubs, showers, lavatories, clothes washers, and laundry trays shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved nonpotable gray water system in accordance with the applicable provisions of Chapter 13.

4. Delete Section 311 of the IPC in its entirety.

5. Change Table 403.1 of the IPC to read:

TABLE 403.1
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES[a] (See Sections 403.1.1 and 403.2)

NO.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS (URINALS: SEE SECTION 424.2)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS (SEE SECTION 410)	OTHER
			MALE	FEMALE	MALE	FEMALE			
1	Assembly	Theaters and other buildings for the performing arts and motion pictures[d]	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
			1 per 85.5[h]						
		Nightclubs, bars, taverns, dance halls and buildings for similar purposes[d]	1 per 40	1 per 40	1 per 75		—	1 per 500	1 service sink
		Restaurants, banquet halls and food courts[d]	1 per 75	1 per 75	1 per 200		—	1 per 500	1 service sink
		Gaming areas	1 per 100 for the first 400 and 1 per 250 for the remainder exceeding 400	1 per 50 for the first 400 and 1 per 150 for the remainder exceeding 400	1 per 250 for the first 750 and 1 per 500 for the remainder exceeding 750		—	1 per 1,000	1 service sink
			1 per 66.67 for the first 800 and 1 per 187.5 for the remainder exceeding 800[h]						

		Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums[d]	1 per 125	1 per 65	1 per 200	—	1 per 500	1 service sink
			1 per 85.5[h]					
		Passenger terminals (other than airport terminals) and transportation facilities[d]	1 per 500	1 per 500	1 per 750	—	1 per 1,000	1 service sink
		Airport terminals	1 per 500	1 per 100 for the first 500 and 1 per 150 for the remainder exceeding 500	1 per 750	—	1 per 1,000	1 service sink
		Places of worship and other religious services[d]	1 per 150	1 per 75	1 per 200	—	1 per 1,000	1 service sink
			1 per 100[h]					
		Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	1 per 1,000	1 service sink
			1 per 52.2 for the first 3,025 and 1 per 80 for the remainder exceeding 3, 025[h]		1 per 171.4[h]			
		Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities[f]	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	1 per 1,000	1 service sink
			1 per 52.2 for the first 3,025 and 1 per 80 for the remainder exceeding 3,025[h]		1 per 171.4[h]			

6. Add footnotes "g" and "h" to Table 403.1 of the IPC to read:

g. The occupant load for pools shall be in accordance with the "Skating rinks, swimming pools" category of Table 1004.5 of the IBC.

h. Use this fixture ratio for determining the minimum number of fixtures for multi-user gender-neutral toilet facilities.

7. ~~Add an exception~~ Change Exceptions 2 and 3 to Section 403.1.1 of the IPC to read (Exception 1 remains):

2. ~~In other than Group A Occupancies where occupant ratios differ from 50/50 split, distribution of the sexes is not required~~ Where multiuser facilities are designed to serve all genders, the minimum fixture count shall be calculated 100% based on the total occupant load. 3. The total occupant load shall not be required to be divided in half with a distribution of sexes where single-user water closets and bathing room fixtures are provided in accordance with Section 403.1.2.

~~8. Change Section 403.1.2 of the IPC to read:~~

~~403.1.2 Single-user toilet and bathing room fixtures. The plumbing fixtures located in single-user toilet and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1109.2.1 of the International Building Code, shall contribute toward the total number of required plumbing fixtures for a building or tenant space. Single-user toilet and bathing rooms, and family or assisted-use toilet rooms and bathing rooms shall be identified as being available for use by all persons regardless of their sex.~~

~~The total number of fixtures shall be permitted to be based on the required number of separate facilities or based on the aggregate of any combination of single-user or separate facilities.~~

~~9.~~ 8. Add Section 403.1.4 and Table 403.1.4 to the IPC to read:

403.1.4 Marina fixtures. Notwithstanding any provision to the contrary, plumbing fixtures shall be provided for marinas in the minimum number shown in Table 403.1.4. Fixtures shall be located within 500 feet walking distance from the shore end of any dock they serve. Separate facilities shall be provided for each sex with an equal number of fixtures of each type in each facility, except that separate facilities are not required where the number of slips is less than 25. Urinals may be substituted for up to 50% of water closets.

Table 403.1.4
Minimum Number of Required Plumbing Fixtures for Marinas

Number of Slips	Plumbing Fixtures		
	Water Closets	Lavatories	Showers
1 - 24	1	1	1
25 - 49	4	4	2
50 - 99	6	4	2
100 - 149	8	6	4
150 - 199	10	8	4
200 - 249	12	10	6
250 or greater	Two additional fixtures of each type for each 100 additional slips.		

~~10. Add exceptions 5 and~~ 9. Change Exception 6 to Section 403.2 of the IPC to read:

~~5. Separate facilities shall not be required to be designated by sex where single-user toilet rooms are provided in accordance with Section 403.1.2.~~

6. Separate facilities shall not be required where multi-user gender-neutral facilities are provided in accordance with Section 405.3 and Section ~~1109.2.4~~ 1109.2.6 of the VCC.

~~11. Change Section 403.2.1 of the IPC to read~~

~~12.~~ 10. Change Section 403.3.3 of the IPC and add Exception 3 to Section 403.3.3 of the IPC (Exceptions 1 and 2 remain as they are), to read:

403.3.3 Location of toilet facilities in occupancies other than malls and airports. In occupancies other than covered and open mall buildings and airport terminals, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities, and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m).

~~Exceptions:~~

~~1. The location and maximum distances of travel to required employee facilities in factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum travel distance are approved.~~

~~2.~~ 3. The location and maximum distances of travel to the required public facilities located on cemetery property are permitted to exceed that required by this section, provided that the location and maximum travel distance are located on the same property and approved.

~~13. The location and maximum distances of travel to required public and employee facilities in Group S occupancies are permitted to exceed that required by this section, provided that the location and maximum distance of travel are approved.~~

~~13.~~ 11. Renumber Section 403.3.5 to Section 403.3.6 and Section 403.3.6 to Section 403.3.7~~;~~ and change Section 403.3.5 to read:

403.3.5 Location of toilet facilities in airport terminals. In airport terminals, the minimum number of public and employee toilet fixtures shall be located before arriving at and after leaving the main security screening checkpoints and shall comply with the following:

1. Shall be based on the actual use and occupant load of those spaces before and after the main security screening checkpoints.

2. Shall not be more than one story above or below the space required to be provided with toilet facilities.

3. The path of travel to such facilities shall not exceed a distance of 300 feet (91 mm). For e~~mployees'~~ employee toilet facilities, the maximum distance of travel shall be measured from ~~the employees'~~ an employee's work area.

403.3.6 Pay facilities. Where pay facilities are installed, such facilities shall be in excess of the required minimum facilities. Required facilities shall be free of charge.

403.3.7 Door locking. Where a toilet room is provided for the use of multiple occupants, the egress door for the room shall not be lockable from the inside of the room. This section does not apply to family or assisted-use toilet rooms.

~~14.~~ 12. Add an exception to Section 405.3.2 of the IPC to read:

Exception: In educational use occupancies, the required lavatory shall be permitted to be located adjacent to the room or space containing the water closet, provided that not more than one operational door is between the water closet and the lavatory.

~~15.~~ 13. Change Section 405.3.4 and add Sections 405.3.4.1 and 405.3.4.2 to the IPC to read:

405.3.4 Water closet compartment. Each water closet utilized by the public or employees shall comply with Sections 405.3.4.1 and 405.3.4.2, as applicable. All fully-enclosed compartments shall be provided with occupancy indicators.

Exceptions:

1. Water closet compartments shall not be required in a single-occupant toilet room with a lockable door.

2. Toilet rooms located in child day care facilities and containing two or more water closets shall be permitted to have one water closet without an enclosing compartment.

3. This provision is not applicable to toilet areas located within Group I-3 housing areas.

405.3.4.1 Separate facilities. Each water closet provided in separate facilities shall occupy a separate compartment with walls or partitions and a door enclosing the fixtures to ensure privacy and shall comply with Section 405.3.1. Accessible water closets and compartments shall comply with ICC A117.1.

405.3.4.2 Multi-user gender-neutral facilities. Each water closet provided in a multi-user, gender-neutral toilet facility shall occupy a separate compartment with walls or partitions, including the doors thereto, ~~which~~ that shall extend to the floor and to the ceiling with maximum 1/2-inch (13 mm) clearances at the floor and ceiling, with gaps not exceeding 1/8-inch (3 mm) between the doors and partitions and partitions and walls, and shall comply with Section 405.3.1. Accessible water closet compartments shall comply with ICC A117.1 and the increased toe clearance requirements.

~~16.~~ 14. Change Section 405.3.5 of the IPC to read:

405.3.5 Urinal separation and partitions. Each urinal utilized by the public or employees shall occupy a separate area with walls or partitions to provide privacy. The horizontal dimension between walls or partitions at each urinal shall be not less than 30 inches (762 mm). The walls or partitions shall begin at a height not greater than 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18 inches (457 mm) or to a point not less than ~~6~~ six inches (152 mm) beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater. All fully-enclosed compartments shall be provided with occupancy indicators.

Exceptions:

1. Urinal partitions shall not be required in a single-occupant or family-assisted-use toilet room with a lockable door.

2. Toilet rooms located in child day care facilities and containing two or more urinals shall be permitted to have one urinal without partitions.

~~17.~~ 15. Add Sections 405.3.5.1 and 405.3.5.2 to the IPC to read:

405.3.5.1 Separate facilities. The walls or partitions for urinals in separate facilities shall begin at a height not more than 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18 inches (457 mm) or to a point not less than ~~6~~ six inches (152 mm) beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater.

405.3.5.2 Multi-user gender-neutral facilities. Each urinal provided in a multi-user gender-neutral toilet facility shall occupy a separate compartment with walls or partitions, including the doors thereto, where the partitions extend to the floor and to the ceiling with maximum 1/2-inch (13 mm) clearances, with gaps not exceeding 1/8-inch (3 mm) between the doors and partitions and partitions and walls, or shall all be located in a separate room with a door, enclosing the urinals to ensure privacy. Where an accessible urinal is located within a compartment, grab bars shall not be required for the urinal, the door shall be located to allow for a forward approach to the urinal, and increased toe clearances shall be provided in accordance with A117.1.

Exceptions:

1. A separate room or compartment shall not be required in a single-occupant toilet room with a lockable door.

2. This provision is not applicable to toilet areas located within Group I-3 occupancy housing areas.

~~18. Change Section 410.4 of the IPC to read:~~

~~410.4 Substitution. Where restaurants provide drinking water in a container free of charge, drinking fountains shall not be required in those restaurants. In other occupancies where more than two drinking fountains are required, water dispensers shall be permitted to be substituted for not more than 50% of the required number of drinking fountains.~~

~~19.~~ 16. Change Section 423.1 of the IPC to read:

423.1 Water connections. Baptisteries, ornamental and lily pools, aquariums, ornamental fountain basins, swimming pools, footbaths and pedicure baths, and similar constructions, where provided with water supplies, shall be protected against backflow in accordance with Section 608.

~~20.~~ 17. Add an exception to Section 424.2 of the IPC to read:

Exception: In each multi-user gender-neutral bathroom or toilet room, urinals shall not be substituted for more than 22.5 ~~percent~~ % of the total number of water closets in Assembly and Educational occupancies. Urinals shall not be substituted for more than 25% of the total number of water closets in all other occupancies.

~~21.~~ 18. Add Section 602.2.1 to the IPC to read:

602.2.1 Nonpotable fixtures and outlets. Nonpotable water shall be permitted to serve nonpotable type fixtures and outlets in accordance with Chapter 13.

~~22.~~ 19. Add Section 603.3 to the IPC to read:

603.3 Tracer wire. Nonmetallic water service piping that connects to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product, shall be utilized. The wire shall be installed in the same trench as the water service piping and within 12 inches (305 mm) of the pipe and shall be installed to within five feet (1524 mm) of the building wall to the point where the building water service pipe intersects with the public water supply. At a minimum, one end of the wire shall terminate above grade to provide access to the wire in a location that is resistant to physical damage, such as with a meter vault or at the building wall.

~~23.~~ 20. Change Section 605.2.1 to read:

605.2.1 Lead content of drinking water pipe and fittings. Pipe, pipe fittings, joints, valves, faucets, and fixture fittings utilized to supply water for drinking or cooking purposes shall comply with NSF 372.

21. Change Item 2 of the exception to Section 605.15.2 to read:

2. The solvent cement used is yellow or green in color.

~~24.~~ 22. Change Section 608.15 to read:

608.15 Location of backflow preventers. Access for inspection, testing, service, repair, and replacement shall be provided to backflow prevention assemblies. Backflow prevention assemblies shall be installed between 12 inches (305 mm) and 60 inches (1525 mm) from grade, floor level, or service platform and as specified by the manufacturer's instructions. Where the manufacturer's listed installation height conflicts with this requirement, the manufacturer's listed heights shall apply. Access shall be provided to backflow prevention devices and as specified by the manufacturer's instructions.

~~25.~~ 23. Add Section 703.7 to the IPC to read:

703.7 Tracer wire. Nonmetallic sanitary sewer piping that discharges to public systems shall be locatable. An insulated copper tracer wire, 18 AWG minimum in size and suitable for direct burial or an equivalent product, shall be utilized. The wire shall be installed in the same trench as the sewer within 12 inches (305 mm) of the pipe and shall be installed to within five feet (1524 mm) of the building wall to the point where the building sewer intersects with the public system. At a minimum, one end of the wire shall terminate above grade in an accessible location that is resistant to physical damage, such as with a cleanout or at the building wall.

~~26.~~ 24. Delete the exception for Section 705.10.2 of the IPC.

~~27. Add Section 717 Relining Building Sewers and Building Drains to the IPC.~~

~~28. Add Sections 717.1 through 717.10, including subsections, to the IPC to read:~~

~~717.1 General. This section shall govern the relining of existing building sewers and building drainage piping.~~

~~717.2 Applicability. The relining of existing building sewer and building drainage piping shall be limited to gravity drainage piping, 4 inches (102 mm) in diameter and larger. The relined piping shall be of the same nominal size as the existing piping.~~

~~717.3 Pre-installation requirements. Prior to commencement of the relining installation, the existing piping sections to be relined shall be descaled and cleaned. After the cleaning process has occurred and water has been flushed through the system, the piping shall be inspected internally by a recorded video camera survey.~~

~~717.3.1 Pre-installation recorded video camera survey. The video survey shall include verification of the project address location. The video shall include notations of the cleanout and fitting locations, and the approximate depth of the existing piping. The video shall also include notations of the length of piping at intervals no greater than 25 feet.~~

~~717.4 Permitting. Prior to permit issuance, the code official shall review and evaluate the pre-installation recorded video camera survey to determine if the piping~~

~~system is capable to be relined in accordance with the proposed lining system manufacturer's installation requirements and applicable referenced standards.~~

~~717.5 Prohibited applications. Where review of the pre-installation recorded video camera survey reveals that piping systems are not installed correctly or defects exist, relining shall not be permitted. The defective portions of piping shall be exposed and repaired with pipe and fittings in accordance with this code. Defects shall include backgrade or insufficient slope, complete pipe wall deterioration or complete separations, such as from tree root invasion or improper support.~~

~~717.6 Relining materials. The relining materials shall be manufactured in compliance with applicable standards and certified as required in Section 303. Fold and form pipe reline materials shall be manufactured in compliance with ASTM F1504 or ASTM F1871.~~

~~717.7 Installation. The installation of relining materials shall be performed in accordance with the manufacturer's installation instructions, applicable referenced standards and this code.~~

~~717.7.1 Material data report. The installer shall record the data as required by the relining material manufacture and applicable standards. The recorded data shall include the location of the project, relining material type, amount of product installed, and conditions of the installation. A copy of the data report shall be provided to the code official prior to final approval.~~

~~717.8 Post-installation recorded video camera survey. The completed relined piping system shall be inspected internally by a recorded video camera survey after the system has been flushed and flow tested with water. The video survey shall be submitted to the code official prior to finalization of the permit. The video survey shall be reviewed and evaluated to provide verification that no defects exist. Any defects identified shall be repaired and replaced in accordance with this code.~~

~~717.9 Certification. A certification shall be provided in writing to the code official, from the permit holder, that the relining materials have been installed in accordance with the manufacturer's installation instructions, the applicable standards, and this code.~~

~~717.10 Approval. Upon verification of compliance with the requirements of Sections 717.1 through 717.9, the code official shall approve the installation.~~

25. Change Section 1003.3.2 of the IPC to read:

1003.3.2 Food waste disposers. Where food waste disposers connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste disposers. Emulsifiers, chemicals, enzymes, and bacteria shall not discharge into the food waste disposer.

~~29.~~ 26. Add an exception to Section 1101.2 of the IPC to read:

Exception. Rainwater nonpotable water systems shall be permitted in accordance with Chapter 13.

~~30.~~ 27. Delete the last sentence from Section 1101.7 of the IPC.

~~31.~~ 28. Delete Section 1105.2 of the IPC.

~~32. Change~~ 29. Delete Section 1106.2.1 and change Section 1106.2 of the IPC to read:

1106.2 Vertical conductors and leaders. Vertical conductors and leaders shall be sized for the maximum projected roof area, in accordance with Tables 1106.2(1) and 1106.2(2).

~~33.~~ 30. Delete Table 1106.2 of the IPC and add Tables 1106.2(1) and 1106.2(2) to the IPC to read:

Table 1106.2(1)
Size of Circular Vertical Conductors and Leaders

Diameter of Leader (inches[a])	Horizontally Projected Roof Area (square feet)											
	Rainfall rate (inches per hour)											
	1	2	3	4	5	6	7	8	9	10	11	12
2	2,280	1,440	960	720	575	480	410	360	320	290	260	240
3	8,800	4,400	2,930	2,200	1,760	1,470	1,260	1,100	980	880	800	730
4	18,400	9,200	6,130	4,600	3,680	3,070	2,630	2,300	2,045	1,840	1,675	1,530
5	34,600	17,300	11,530	8,650	6,920	5,765	4,945	4,325	3,845	3,460	3,145	2,880
6	54,000	27,000	17,995	13,500	10,800	9,000	7,715	6,750	6,000	5,400	4,910	4,500
8	116,000	58,000	38,660	29,000	23,200	19,315	16,570	14,500	12,890	11,600	10,545	9,600

For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m^2.

a. Sizes indicated are the diameter of circular piping. This table is applicable to piping of other shapes, provided the cross-sectional shape fully enclosed a circle of the diameter indicated in this table. For rectangular leaders, see Table 1106.2(2). Interpolation is permitted for pipe sizes that fall between those listed in this table.

Table 1106.2(2)
Size of Rectangular Vertical Conductors and Leaders

Dimensions of Common Leader Sizes	Horizontally Projected Roof Area (square feet)											
	Rainfall rate (inches per hour)											
width x length (inches)[a,b]	1	2	3	4	5	6	7	8	9	10	11	12
1-3/4 x 2-1/2	3,410	1,700	1,130	850	680	560	480	420	370	340	310	280
2 x 3	5,540	2,770	1,840	1,380	1,100	920	790	690	610	550	500	460
2-3/4 x 4-1/4	12,830	6,410	4,270	3,200	2,560	2,130	1,830	1,600	1,420	1,280	1,160	1,060
3 x 4	13,210	6,600	4,400	3,300	2,640	2,200	1,880	1,650	1,460	1,320	1,200	1,100
3-1/2 x 4	15.900	7,950	5,300	3,970	3,180	2,650	2,270	1,980	1,760	1,590	1,440	1,320
3-1/2 x 5	21,310	10,650	7,100	5,320	4,260	3,550	3,040	2,660	2,360	2,130	1,930	1,770
3-3/4 x 4-3/4	21,960	10,980	7,320	5,490	4,390	3,660	3,130	2,740	2,440	2,190	1,990	1,830
3-3/4 x 5-1/4	25,520	12,760	8,500	6,380	5,100	4,250	3,640	3,190	2,830	2,550	2,320	2,120
3-1/2 x 6	27,790	13,890	9,260	6,940	5,550	4,630	3,970	3,470	3,080	2,770	2,520	2,310
4 x 6	32,980	16,490	10,990	8,240	6,590	5,490	4,710	4,120	3,660	3,290	2,990	2,740
5-1/2 x 5-1/2	44,300	22,150	14,760	11,070	8,860	7,380	6,320	5,530	4,920	4,430	4,020	3,690
7-1/2 x 7-1/2	100,500	50,250	33,500	25,120	20,100	16,750	14,350	12,560	11,160	10,050	9,130	8,370

For SI: 1 inch =m, 1 square foot = 0.0929 m^2.

a. Sizes indicated are nominal width x length of the opening for rectangular piping.

b. For shapes not included in this table, Equation 11-1 shall be used to determine the equivalent circular diameter, De, of rectangular piping for use in interpolation using the data from Table 1106.2(1).

(Equation 11-1)

De = (width x length)1/2

where:

De = equivalent circular diameter and De, width and length are in inches.

~~34.~~ 31. Change Section 1106.3 and Table 1106.3 of the IPC to read:

1106.3 Building storm drains and sewers. The size of the building storm drain, building storm sewer and their horizontal branches having a slope of 1/2 unit or less vertical in 12 units horizontal (4% slope) shall be based on the maximum projected roof area in accordance with Table 1106.3. The slope of horizontal branches shall be not less than 1/8 unit vertical in 12 units horizontal (1% slope) unless otherwise approved.

Table 1106.3
Size of Horizontal Storm Drainage Piping

Size of Horizontal Piping (inches)	Horizontally Projected Roof Area (square feet)					
	Rainfall rate (inches per hour)					
	1	2	3	4	5	6
1/8 unit vertical in 12 units horizontal (1% slope)						
3	3,288	1,644	1,096	822	657	548

4	7,520	3,760	2,506	1,800	1,504	1,253
5	13,360	6,680	4,453	3,340	2,672	2,227
6	21,400	10,700	7,133	5,350	4,280	3,566
8	46,000	23,000	15,330	11,500	9,200	7,600
10	82,800	41,400	27,600	20,700	16,580	13,800
12	133,200	66,600	44,400	33,300	26,650	22,200
15	218,000	109,000	72,800	59,500	47,600	39,650
1/4 unit vertical in 12 units horizontal (2% slope)						
3	4,640	2,320	1,546	1,160	928	773
4	10,600	5,300	3,533	2,650	2,120	1,766
5	18,880	9,440	6,293	4,720	3,776	3,146
6	30,200	15,100	10,066	7,550	6,040	5,033
8	65,200	32,600	21,733	16,300	13,040	10,866
10	116,800	58,400	38,950	29,200	23,350	19,450
12	188,000	94,000	62,600	47,000	37,600	31,350
15	336,000	168,000	112,000	84,000	67,250	56,000
1/2 unit vertical in 12 units horizontal (4% slope)						
3	6,576	3,288	2,295	1,644	1,310	1,096
4	15,040	7,520	5,010	3,760	3,010	2,500
5	26,720	13,360	8,900	6,680	5,320	4,450
6	42,800	21,400	13,700	10,700	8,580	7,140
8	92,000	46,000	30,650	23,000	18,400	15,320
10	171,600	85,800	55,200	41,400	33,150	27,600
12	266,400	133,200	88,800	66,600	53,200	44,400
15	476,000	238,000	158,800	119,000	95,300	79,250
For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m^2.						

~~35.~~ 32. Change Section 1106.6 and Table 1106.6 of the IPC to read:

1106.6 Size of roof gutters. The size of semicircular gutters shall be based on the maximum projected roof area in accordance with Table 1106.6.

Table 1106.6
Size of Semicircular Roof Gutters

Diameter of Gutters (inches)	Horizontally Projected Roof Area (square feet)					
	Rainfall rate (inches per hour)					
	1	2	3	4	5	6
1/16 unit vertical in 12 units horizontal (0.5% slope)						
3	680	340	226	170	136	113
4	1,440	720	480	360	288	240
5	2,500	1,250	834	625	500	416
6	3,840	1,920	1,280	960	768	640
7	5,520	2,760	1,840	1,380	1,100	918
8	7,960	3,980	2,655	1,990	1,590	1,325
10	14,400	7,200	4,800	3,600	2,880	2,400
1/8 unit vertical in 12 units horizontal (1% slope)						

3	960	480	320	240	192	160
4	2,040	1,020	681	510	408	340
5	3,520	1,760	1,172	880	704	587
6	5,440	2,720	1,815	1,360	1,085	905
7	7,800	3,900	2,600	1,950	1,560	1,300
8	11,200	5,600	3,740	2,800	2,240	1,870
10	20,400	10,200	6,800	5,100	4,080	3,400
1/4 unit vertical in 12 units horizontal (2% slope)						
3	1,360	680	454	340	272	226
4	2,880	1,440	960	720	576	480
5	5,000	2,500	1,668	1,250	1,000	834
6	7,680	3,840	2,560	1,920	1,536	1,280
7	11,040	5,520	3,860	2,760	2,205	1,840
8	15,920	7,960	5,310	3,980	3,180	2,655
10	28,800	14,400	9,600	7,200	5,750	4,800
1/2 unit vertical in 12 units horizontal (4% slope)						
3	1,920	960	640	480	384	320
4	4,080	2,040	1,360	1,020	816	680
5	7,080	3,540	2,360	1,770	1,415	1,180
6	11,080	5,540	3,695	2,770	2,220	1,850
7	15,600	7,800	5,200	3,900	3,120	2,600
8	22,400	11,200	7,460	5,600	4,480	3,730
10	40,000	20,000	13,330	10,000	8,000	6,660
For SI: 1 inch = 25.4 mm, 1 square foot = 0.0929 m^2.						

~~36.~~ 33. Add Section 1114 Values for Continuous Flow to the IPC.

~~37.~~ 34. Add Section 1114.1 to the IPC to read:

1114.1 Equivalent roof area. Where there is a continuous or semicontinuous discharge into the building storm drain or building storm sewer, such as from a pump, ejector, air conditioning plant, or similar device, each gallon per minute (L/m) of such discharge shall be computed as being equivalent to 96 square feet (9 m^2) of roof area, based on a rainfall rate of 1 inch (25.4 mm) per hour.

~~38.~~ 35. Change Sections 1301.1 through 1301.12 and add Sections 1301.13 through 1301.18, including subsections, to the IPC to read:

1301.1 Scope. The provisions of Chapter 13 shall govern the materials, design, construction, and installation of nonpotable water systems subject to this code. In addition to the applicable provision of this section, reclaimed water shall comply with the requirements of Section 1304.

1301.1.1 Design of nonpotable water systems. All portions of nonpotable water systems subject to this code shall be constructed using the same standards and requirements for the potable water systems or drainage systems as provided for in this code unless otherwise specified in this chapter.

1301.2 Makeup water. Makeup water shall be provided for all nonpotable water supply systems. The makeup water system shall be designed and installed to provide supply of water in the amounts and at the pressures specified in this code. The makeup water supply shall be potable and be protected against backflow in accordance with the applicable requirements of Section 608.

1301.2.1 Makeup water sources. Potable water shall be provided as makeup water for reclaimed water systems. Nonpotable water shall be permitted to serve as makeup water for gray water and rainwater systems.

1301.2.2 Makeup water supply valve. A full-open valve shall be provided on the makeup water supply line.

1301.2.3 Control valve alarm. Makeup water systems shall be fitted with a warning mechanism that alerts the user to a failure of the inlet control valve to close correctly. The alarm shall activate before the water within the storage tank begins to discharge into the overflow system.

1301.3 Sizing. Nonpotable water distribution systems shall be designed and sized for peak demand in accordance with approved engineering practice methods that comply with the applicable provisions of Chapter 6.

1301.4 Signage required. All nonpotable water outlets, other than water closets and urinals, such as hose connections, open-ended pipes, and faucets, shall be

identified at the point of use for each outlet with signage that reads as follows: "Nonpotable water is utilized for (insert application name). Caution: nonpotable water. DO NOT DRINK." The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and in colors in contrast to the background on which they are applied. The pictograph shown in Figure 1301.4 shall appear on the signage required by this section.



Figure 1301.4
Pictograph DO NOT DRINK

1301.5 Potable water supply system connections. Where a potable water supply system is connected to a nonpotable water system, the potable water supply shall be protected against backflow in accordance with the applicable provisions of Section 608.

1301.6 Nonpotable water system connections. Where a nonpotable water system is connected and supplies water to another nonpotable water system, the nonpotable water system that supplies water shall be protected against backflow in accordance with the applicable provisions of Section 608.

1301.7 Approved components and materials. Piping, plumbing components, and materials used in the nonpotable water drainage and distribution systems shall be approved for the intended application and compatible with the water and any disinfection or treatment systems used.

1301.8 Insect and vermin control. Nonpotable water systems shall be protected to prevent the entrance of insects and vermin into storage and piping systems. Screen materials shall be compatible with system material and shall not promote corrosion of system components.

1301.9 Freeze protection. Nonpotable water systems shall be protected from freezing in accordance with the applicable provisions of Chapter 3.

1301.10 Nonpotable water storage tanks. Nonpotable water storage tanks shall be approved for the intended application and comply with Sections 1301.10.1 through 1301.10.12.

1301.10.1 Sizing. The holding capacity of storage tanks shall be sized for the intended use.

1301.10.2 Inlets. Storage tank inlets shall be designed to introduce water into the tank and avoid agitating the contents of the storage tank. The water supply to storage tanks shall be controlled by fill valves or other automatic supply valves designed to stop the flow of incoming water before the tank contents reach the overflow pipes.

1301.10.3 Outlets. Outlets shall be located at least ~~4~~ four inches (102 mm) above the bottom of the storage tank and shall not skim water from the surface.

1301.10.4 Materials and location. Storage tanks shall be constructed of material compatible with treatment systems used to treat water. ~~Above-grade~~ Above-grade storage vessels shall be constructed using opaque, UV-resistant materials, such as tinted plastic, lined metal, concrete, or wood or painted to prevent algae growth. ~~Above-grade~~ Above-grade storage tanks shall be protected from direct sunlight unless their design specifically incorporates the use of the sunlight heat transfer. Wooden storage tanks shall be provided with a flexible liner. Storage tanks and their manholes shall not be located directly under soil or waste piping or sources of contamination.

1301.10.5 Foundation and supports. Storage tanks shall be supported on a firm base capable of withstanding the storage tank's weight when filled to capacity. Storage tanks shall be supported in accordance with the applicable provisions of the IBC.

1301.10.5.1 Ballast. Where the soil can become saturated, an underground storage tank shall be ballasted~~,~~ or otherwise secured~~,~~ to prevent the effects of buoyancy. The combined weight of the tank and hold down ballast shall meet or exceed the buoyancy force of the tank. Where the installation requires a foundation, the foundation shall be flat and shall be designed to support the storage tank weight when full, consistent with the bearing capability of adjacent soil.

1301.10.5.2 Structural support. Where installed below grade, storage tank installations shall be designed to withstand earth and surface structural loads without damage.

1301.10.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table 606.5.4. The overflow outlet shall discharge at a point not less than ~~6~~ six inches (152 mm) above the roof or roof drain, floor or floor drain, or over an open water-supplied fixture. The overflow outlet shall terminate through a check valve. Overflow pipes shall not be directed on walkways. The overflow drain shall not be equipped with a shutoff valve. A minimum of one cleanout shall be provided on each overflow pipe in accordance with the applicable provisions of Section 708.

1301.10.7 Access. A minimum of one access opening shall be provided to allow inspection and cleaning of the tank interior. Access openings shall have an approved locking device or other approved method of securing access. Below grade storage tanks, located outside of the building, shall be provided with either a manhole not less than 24 inches (610 mm) square or a manhole with an inside diameter not less than 24 inches (610 mm). The design and installation of access openings shall prohibit surface water from entering the tank. Each manhole cover shall have an approved locking device or other approved method of securing access.

Exception: Storage tanks under 800 gallons (3028 L) in volume installed below grade shall not be required to be equipped with a manhole, but shall have an access opening not less than ~~8~~ eight inches (203 mm) in diameter to allow inspection and cleaning of the tank interior.

1301.10.8 Venting. Storage tanks shall be vented. Vents shall not be connected to sanitary drainage system. Vents shall be at least equal in size to the internal diameter of the drainage inlet pipe ~~or pipes~~ connected to the tank. Where installed at grade, vents shall be protected from contamination by means of a U-bend installed with the opening directed downward. Vent outlets shall extend a minimum of 12 inches (304.8 mm) above grade~~,~~ or as necessary to prevent surface water from entering the storage tank. Vent openings shall be protected against the entrance of vermin and insects. Vents serving gray water tanks shall terminate in accordance with the applicable provisions of Sections 903 and 1301.8.

1301.10.9 Drain. Where drains are provided, they shall be located at the lowest point of the storage tank. The tank drain pipe shall discharge as required for overflow pipes and shall not be smaller in size than specified in Table 606.5.7. A minimum of one cleanout shall be provided on each drain pipe in accordance with Section 708.

1301.10.10 Labeling and signage. Each nonpotable water storage tank shall be labeled with its rated capacity and the location of the upstream bypass valve. Underground and otherwise concealed storage tanks shall be labeled at all access points. The label shall read: "CAUTION: NONPOTABLE WATER – DO NOT DRINK." Where an opening is provided that could allow the entry of personnel, the opening shall be marked with the words: "DANGER – CONFINED SPACE." Markings shall be indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material mounted on the tank or shall be indelibly printed on the tank. The letters of the words shall be not less than 0.5 inches (12.7 mm) in height and shall be of a color in contrast with the background on which they are applied.

1301.10.11 Storage tank tests. Storage tanks shall be tested in accordance with the following:

1. Storage tanks shall be filled with water to the overflow line prior to and during inspection. All seams and joints shall be left exposed and the tank shall remain watertight without leakage for a period of 24 hours.

2. After 24 hours, supplemental water shall be introduced for a period of 15 minutes to verify proper drainage of the overflow system and verify that there are no leaks.

3. Following a successful test of the overflow, the water level in the tank shall be reduced to a level that is at ~~2~~ two inches (50.8 mm) below the makeup water offset point. The tank drain shall be observed for proper operation. The makeup water system shall be observed for proper operation, and successful automatic shutoff of the system at the refill threshold shall be verified. Water shall not be drained from the overflow at any time during the refill test.

4. Air tests shall be permitted in lieu of water testing as recommended by the tank manufacturer or the tank standard.

1301.10.12 Structural strength. Storage tanks shall meet the applicable structural strength requirements of the IBC.

1301.11 Trenching requirements for nonpotable water system piping. Underground nonpotable water system piping shall be horizontally separated from the building sewer and potable water piping by ~~5~~ five feet (1524 mm) of undisturbed or compacted earth. Nonpotable water system piping shall not be located in, under, or above sewage systems cesspools, septic tanks, septic tank drainage fields, or seepage pits. Buried nonpotable system piping shall comply with the requirements of this code for the piping material installed.

Exceptions:

1. The required separation distance shall not apply where the bottom of the nonpotable water pipe within ~~5~~ five feet (1524 mm) of the sewer is equal to or greater than 12 inches (305 mm) above the top of the highest point of the sewer and the pipe materials ~~conforms~~ conform to Table 702.3.

2. The required separation distance shall not apply where the bottom of the potable water service pipe within ~~5~~ five feet (1524 mm) of the nonpotable water pipe is a minimum of 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table 605.4.

3. Nonpotable water pipe is permitted to be located in the same trench with building sewer piping, provided that such sewer piping is constructed of materials that comply with the requirements of Table 702.2.

4. The required separation distance shall not apply where a nonpotable water pipe crosses a sewer pipe, provided that the pipe is sleeved to at least ~~5~~ five feet (1524 mm) horizontally from the sewer pipe centerline on both sides of such crossing with pipe materials that comply with Table 702.2.

5. The required separation distance shall not apply where a potable water service pipe crosses a nonpotable water pipe, provided that the potable water service pipe is sleeved for a distance of at least ~~5~~ five feet (1524 mm) horizontally from the centerline of the nonpotable pipe on both sides of such crossing with pipe materials that comply with Table 702.2.

1301.12 Outdoor outlet access. Sillcocks, hose bibs, wall hydrants, yard hydrants, and other outdoor outlets that are supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.

1301.13 Drainage and vent piping and fittings. Nonpotable drainage and vent pipe and fittings shall comply with the applicable material standards and installation requirements in accordance with provisions of Chapter 7.

1301.13.1. Labeling and marking. Identification of nonpotable drainage and vent piping shall not be required.

1301.14 Pumping and control system. Mechanical equipment, including pumps, valves, and filters, shall be accessible and removable in order to perform repair, maintenance, and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be designed for the intended application in accordance with the applicable provisions of Section 604.

1301.15 Water-pressure reducing valve or regulator. Where the water pressure supplied by the pumping system exceeds 80 psi (552 kPa) static, a pressure-reducing valve shall be installed to reduce the pressure in the nonpotable water distribution system piping to 80 psi (552 kPa) static or less. Pressure-reducing valves shall be specified and installed in accordance with the applicable provisions of Section 604.8.

1301.16 Distribution pipe. Distribution piping utilized in nonpotable water ~~stems~~ systems shall comply with Sections 1301.16.1 through 1301.16.4.

1301.16.1 Materials, joints, and connections. Distribution piping and fittings shall comply with the applicable material standards and installation requirements in accordance with the applicable provisions of Chapter 6.

1301.16.2 Design. Distribution piping shall be designed and sized in accordance with the applicable provisions of Chapter 6.

1301.16.3 Labeling and marking. Distribution piping labeling and marking shall comply with Section 608.9.

1301.16.4 Backflow prevention. Backflow preventers shall be installed in accordance with the applicable provisions of Section 608.

1301.17 Tests and inspections. Tests and inspections shall be performed in accordance with Sections 1301.17.1 through 1301.17.5.

1301.17.1 Drainage and vent pipe test. Drain, waste, and vent piping used for gray water and rainwater nonpotable water systems shall be tested in accordance with the applicable provisions of Section 312.

1301.17.2 Storage tank test. Storage tanks shall be tested in accordance with the Section 1301.10.11.

1301.17.3 Water supply system test. Nonpotable distribution piping shall be tested in accordance with Section 312.5.

1301.17.4 Inspection and testing of backflow prevention assemblies. The testing of backflow preventers and backwater valves shall be conducted in accordance with Section 312.10.

1301.17.5 Inspection of vermin and insect protection. Inlets and vent terminations shall be visually inspected to verify that each termination is installed in accordance with Section 1301.10.8.

1301.18 Operation and maintenance manuals. Operations and maintenance materials for nonpotable water systems shall be provided as prescribed by the system component manufacturers and supplied to the owner to be kept in a readily accessible location.

~~39.~~ 36. Change the title of Section 1302 of the IPC to "Gray Water Nonpotable Water Systems."

~~40.~~ 37. Change Sections 1302.1 through 1302.6, including subsections, of the IPC to read as follows:

1302.1 Gray water nonpotable water systems. This code is applicable to the plumbing fixtures, piping or piping systems, storage tanks, drains, appurtenances, and appliances that are part of the distribution system for gray water within buildings and to storage tanks and associated piping that are part of the distribution system for gray water outside of buildings. This code does not regulate equipment used for~~,~~ or the methods of~~,~~ processing, filtering, or treating gray water~~,~~ that may be regulated by the Virginia Department of Health or the Virginia Department of Environmental Quality.

1302.1.1 Separate systems. Gray water nonpotable water systems, unless approved otherwise under the permit from the Virginia Department of Health, shall be separate from the potable water system of a building with no cross connections between the two systems except as permitted by the Virginia Department of Health.

1302.2 Water quality. Each application of gray water reuse shall meet the minimum water quality requirements set forth in Sections 1302.2.1 through 1302.2.4 unless otherwise superseded by other state agencies.

1302.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection ~~or~~, other treatment, or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

1302.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than ~~4~~ four parts per million (4 mg/L) of free chlorine, combined chlorine, or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

1302.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.

1302.2.4 Filtration required. Gray water utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

1302.3 Storage tanks. Storage tanks utilized in gray water nonpotable water systems shall comply with Section 1301.10.

1302.4 Retention time limits. Untreated gray water shall be retained in storage tanks for a maximum of 24 hours.

1302.5 Tank Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table 1302.5.1.

Table 1302.5.1
Location of Nonpotable Gray Water Reuse Storage Tanks

Element	Minimum Horizontal Distance from Storage Tank (feet)
Lot line adjoining private lots	5
Sewage systems	5
Septic tanks	5
Water wells	50
Streams and lakes	50
Water service	5
Public water main	10

1302.6 Valves. Valves shall be supplied on gray water nonpotable water drainage systems in accordance with Sections 1302.6.1 and 1302.6.2.

1302.6.1 Bypass valve. One three-way diverter valve certified to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank~~,~~ or drainfield~~,~~ as applicable, to divert untreated gray water to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be labeled to indicate the direction of flow, connection, and storage tank or drainfield connection. Bypass valves shall be provided with access for operation and maintenance. Two shutoff valves shall not be installed to serve as a bypass valve.

1302.6.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section 715.

~~41.~~ 38. Delete Sections 1302.7 through 1302.13.4, including subsections, of the IPC.

~~42.~~ 39. Change the title of Section 1303 of the IPC to "Rainwater Nonpotable Water Systems."

~~43.~~ 40. Change Sections 1303.1 through 1303.10, including subsections, of the IPC to read as follows:

1303.1 General. The provisions of this section shall govern the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications. The provisions of CSA B805/ICC 805 shall be permitted as an alternative to the provisions contained in this section for the design, construction, installation, alteration, and repair of rainwater nonpotable water systems for the collection, storage, treatment, and distribution of rainwater for nonpotable applications. Roof runoff or stormwater runoff collection surfaces shall be limited to roofing materials, public pedestrian accessible roofs, and subsurface collection identified in CSA B805/ICC 805 Table 7.1. Stormwater runoff shall not be collected from any other surfaces.

1303.2 Water quality. Each application of rainwater reuse shall meet the minimum water quality requirements set forth in Sections 1303.2.1 through 1303.2.4 unless otherwise superseded by other state agencies.

1303.2.1 Disinfection. Where the intended use or reuse application for nonpotable water requires disinfection ~~or~~, other treatment, or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use or reuse.

1303.2.2 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than ~~4~~ four parts per million (4 mg/L) of free chlorine, combined chlorine, or total chlorine. Where ozone is used for disinfection, the nonpotable water shall not exceed 0.1 parts per million (by volume) of ozone at the point of use.

1303.2.3 Filtration. Water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall

utilize a pressure gauge or other approved method to indicate when a filter requires servicing or replacement. Shutoff valves installed immediately upstream and downstream of the filter shall be included to allow for isolation during maintenance.

1303.2.4 Filtration required. Rainwater utilized for water closet and urinal flushing applications shall be filtered by a 100 micron or finer filter.

1303.3 Collection surface. Rainwater shall be collected only from aboveground impervious roofing surfaces constructed from approved materials. Overflow or discharge piping from appliances ~~or,~~ equipment, or both, including ~~but not limited to~~ evaporative coolers, water heaters, and solar water heaters shall not discharge onto rainwater collection surfaces.

1303.4 Collection surface diversion. At a minimum, the first 0.04 inches (1.016 mm) of each rain event of 25 gallons (94.6 L) per 1,000 square feet (92.9 m^2) shall be diverted from the storage tank by automatic means and not require the operation of manually operated valves or devices. Diverted water shall not drain onto other collection surfaces that are discharging to the rainwater system or to the sanitary sewer. Such water shall be diverted from the storage tank and discharged in an approved location.

1303.5 Pre-tank filtration. Downspouts, conductors, and leaders shall be connected to a pre-tank filtration device. The filtration device shall not permit materials larger than 0.015 inches (0.4 mm).

1303.6 Roof gutters and downspouts. Gutters and downspouts shall be constructed of materials that are compatible with the collection surface and the rainwater quality for the desired end use. Joints shall be made watertight.

1303.6.1 Slope. Roof gutters, leaders, and rainwater collection piping shall slope continuously toward collection inlets. Gutters and downspouts shall have a slope of not less than ~~1~~ one unit in 96 units along their entire length and shall not permit the collection or pooling of water at any point.

Exception: Siphonic roof drainage systems installed in accordance with Chapter 11 shall not be required to have slope.

1303.6.2 Size. Gutters and downspouts shall be installed and sized in accordance with Section 1106.6 and local rainfall rates.

1303.6.3 Cleanouts. Cleanouts or other approved openings shall be provided to permit access to all filters, flushes, pipes, and downspouts.

1303.7 Storage tanks. Storage tanks utilized in rainwater nonpotable water systems shall comply with Section 1301.10.

1303.8 Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table 1303.8.1.

Table 1303.8.1
Location of Rainwater Storage Tanks

Element	Minimum Horizontal Distance from Storage Tank (feet)
Lot line adjoining private lots	5
Sewage systems	5
Septic tanks	5

1303.9 Valves. Valves shall be installed in collection and conveyance drainage piping of rainwater nonpotable water systems in accordance with Sections 1303.9.1 and 1303.9.2.

1303.9.1 Influent diversion. A means shall be provided to divert storage tank influent to allow maintenance and repair of the storage tank system.

1303.9.2 Backwater valve. Backwater valves shall be installed on each overflow and tank drain pipe to prevent unwanted water from draining back into the storage tank. If the overflow and drain piping arrangement is installed to physically not allow water to drain back into the tank, such as in the form of an air gap, backwater valves shall not be required. Backwater valves shall be constructed and installed in accordance with Section ~~715~~ 714.

1303.10 Tests and inspections. Tests and inspections shall be performed in accordance with Sections 1303.10.1 through 1303.10.2.

1303.10.1 Roof gutter inspection and test. Roof gutters shall be inspected to verify that the installation and slope is in accordance with Section 1303.6.1. Gutters shall be tested by pouring a minimum of one gallon of water into the end of the gutter opposite the collection point. The gutter being tested shall not leak and shall not retain standing water.

1303.10.2 Collection surface diversion test. A collection surface diversion test shall be performed by introducing water into the gutters or onto the collection surface area. Diversion of the first quantity of water in accordance with the requirements of Section 1303.4 shall be verified.

~~44.~~ 41. Delete Sections 1303.11 through 1303.16.4, including subsections, of the IPC.

~~45.~~ 42. Change Sections 1304.1 and 1304.2 of the IPC to read as follows:

1304.1 General. Reclaimed water, water reclamation systems, reclaimed water distribution systems, and allowable nonpotable reuses of reclaimed water are as

defined or specified in and governed by the Virginia Water Reclamation and Reuse Regulation (9VAC25-740). Permits from the Virginia State Water Control Board are required for such systems and reuses. The provisions of Section 1304 shall govern the design, construction, installation, alterations, and repair of plumbing fixtures, piping or piping systems, storage tanks, drains, appurtenances, and appliances that are part of the distribution system for reclaimed water within buildings and to storage tanks for reclaimed water as defined in the Virginia Water Reclamation and Reuse Regulation (9VAC25-740) and associated piping outside of buildings that deliver reclaimed water into buildings. Where conflicts occur between this code and the Virginia Water Reclamation and Reuse Regulation (9VAC25-740), the provisions of the Virginia Water Reclamation and Reuse Regulation (9VAC25-740) shall apply unless determined otherwise by the Virginia Department of Environmental Quality and DHCD through a memorandum of agreement.

1304.2 Design of reclaimed water systems. The design of reclaimed water systems shall conform to applicable requirements of Section 1301.

Exception: The design of reclaimed water systems shall conform to applicable requirements of the Virginia Water Reclamation and Reuse Regulation (9VAC25-740) for the following:

1. Identification, labeling, and posting of signage for reclaimed water systems in lieu of signage requirements described in Section 1301.4.

2. Sizing of system storage as defined in the Virginia Water Reclamation and Reuse Regulation (9VAC25-740), in addition to storage sizing requirements described in Section 1301.10.1.

3. Signage and labeling for reclaimed water storage in addition to labeling and signage requirements described in Section 1301.10.10.

4. Minimum separation distances and configurations for in-ground reclaimed water distribution piping in lieu of trenching requirements for nonpotable water systems described in Section 1301.11.

~~46.~~ 43. Delete Sections 1304.3 and ~~1304.4.2,~~ 1304.4, including subsections, of the IPC.

~~47.~~ 44. Add the following referenced standards to Chapter 15 as follows: (Standards not shown remain the same.)

Standard Reference Number	Title	Referenced in Code Section Number
ASTM F1871-2011	Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation	717.6
ASTM F1504-2014	Standard Specification for Folded Poly (Vinyl Chloride) (PVC) for Existing Sewer and Conduit Rehabilitation	717.6
~~CSA B805-18/ICC 805-2018~~	~~Rainwater Harvesting Systems~~	~~1303.1~~

C. Change Section 2902.1 of the IBC to read:

2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number as shown in Table 403.1 of the VPC based on the actual use of the building or space. Uses not shown in Table 403.1 of the VPC shall be considered individually by the code official. The number of occupants shall be determined by this code.

D. Delete Table 2902.1 and Sections 2902.1.1 through ~~2902.6~~ 2902.7.

13VAC5-63-330. Chapter 30 Elevators and conveying systems.

A. ~~Change~~ Add an exception to Section 3002.4 of the IBC to read:

~~3002.4 Elevator car to accommodate ambulance stretcher. Where elevators are provided in buildings four or more stories above, or four or more stories below, grade plane, at least one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance stretcher 24 inches by 84 inches (610 mm by 2134 mm) with not less than five inch (127 mm) radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than three inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame.~~

Exception: Elevators in multistory dwelling units or guest rooms.

B. Change Section 3003.3 of the IBC to read:

3003.3 Fire service elevator keys. All elevators shall be equipped to operate with either a standardized or non-standardized fire service elevator key in accordance with the IFC.

C. Change Section 3005.4 of the IBC to read:

3005.4 Machine and control rooms, control spaces, and machinery spaces. Elevator machine rooms, rooms and spaces housing elevator controllers, and machinery spaces outside of but attached to a hoistway that have openings into

the hoistway shall be enclosed with fire barriers constructed in accordance with Section 707 ~~or~~, horizontal assemblies constructed in accordance with Section 711, or both. The fire-resistance rating shall not be less than the required rating of the hoistway enclosure. Openings in the fire barriers shall be protected with assemblies having a fire protection rating not less than that required for the hoistway enclosure doors.

Exceptions:

1. ~~Where~~ For other than fire service access elevators and occupant evacuation elevators, where elevator machine rooms, rooms and spaces housing elevator controllers, and machinery spaces do not abut and do not have openings to the hoistway enclosure they serve, the fire barrier constructed in accordance with Section 707 ~~or~~, horizontal assemblies constructed in accordance with Section 711, or both~~,~~ shall be permitted to be reduced to a one-hour fire-resistance rating.

2. ~~In~~ For other than fire service access elevators and occupant evacuation elevators, in buildings four stories or less above grade plane when elevator machine rooms, rooms and spaces housing elevator controllers, and machinery spaces do not abut and have no openings to the hoistway enclosure they serve, the elevator machine rooms, rooms and spaces housing elevator controllers, and machinery spaces are not required to be fire-resistance rated.

D. Add Section 3005.7 to the IBC to read:

3005.7 Machine-room-less designs. Where machine-room-less designs are utilized they shall comply with the provisions of ASME A17.1 and incorporate the following:

1. Where the elevator car-top will be used as a work platform, it shall be equipped with permanently installed guards on all open sides. Guards shall be permitted to be of collapsible design~~,~~ but otherwise must conform to all applicable requirements of this code for guards.

2. Where the equipment manufacturer's procedures for machinery removal and replacement depend on overhead structural support or lifting points, such supports or lifting points shall be permanently installed at the time of initial equipment installation.

3. Where the structure that the elevator will be located in is required to be fully sprinklered by this code, the hoistway that the elevator machine is located in shall be equipped with a fire suppression system as a machine room in accordance with NFPA 13. Smoke detectors for the automatic initiation of Phase I Emergency Recall Operation~~,~~ and heat detectors or other approved devices that automatically disconnect the main line power supply to the elevators, shall be installed within the hoistway.

E. ~~Delete~~ Change Section ~~3006~~ 3006.1 (Items 1 through 5 remain) of the IBC ~~in its entirety.~~ to read:

3006.1 General. Where provided to comply with applicable requirements set forth elsewhere in this code, elevator hoistway openings and enclosed elevator lobbies shall be provided in accordance with the following:

F. Change the exception to 3007.6 to read:

Exception: Where a fire service access elevator has two entrances onto a floor, the second entrance shall be permitted to be protected in accordance with ~~IBC~~ Section 3006.3 of the IBC.

G. Change Section 3008.1 of the IBC to read:

3008.1 General. Where elevators in buildings greater than 420 feet (128,016 mm) in building height are to be used for occupant self-evacuation during fires, ~~all~~ passenger elevators for general public use shall comply with this section.

13VAC5-63-336. Chapter 31 Special construction.

A. Change the title of IBC Section 3109 to read:

Swimming Pools, Swimming Pool Enclosures, and Aquatic Recreational Facilities.

B. Change Section 3109.1 of the IBC to read as follows, add Section 3109.1.1 to the IBC to read as follows~~, and delete the remainder of Section 3109 of the IBC~~:

3109.1 General. Swimming pools, swimming pool enclosures, and aquatic recreational facilities, as that term is defined in the ISPSC, shall comply with applicable provisions of the ISPSC.

3109.1.1 Changes to the ISPSC. The following changes shall be made to the ISPSC:

1. Add Section 410.2 and related subsections to the ISPSC to read:

410.2 Showers. Showers shall be in accordance with Sections 410.2.1 through 410.2.5.

410.2.1 Deck hand shower or shower spray unit. Not less than one and not greater than half of the total number of showers required by Section 410.1 shall be a hand shower or spray shower unit located on the deck of or at the entrance of each pool.

410.2.2 Anti-scald device. Where heated water is provided to the showers, the shower water supply shall be controlled by an anti-scald device.

410.2.3 Water heater and mixing valve. Bather access to water heaters and thermostatically controlled mixing valves for showers shall be prohibited.

410.2.4 Flow rate. Each showerhead shall have a water flow of not less than ~~2~~ two gallons per minute (7.6 lpm).

410.2.5 Temperature. At each showerhead, the heated shower water temperature shall not exceed 120°F (49°C) and shall not be less than 90°F (32°C).

~~2. Change the title of Section 609 of the ISPSC to read:~~

~~Dressing and Sanitary Facilities.~~

~~3.~~ 2. Change Section 609.3.1 of the ISPSC to read:

609.3.1 Deck hand shower or shower spray unit. Not less than one and not greater than half of the total number of showers required by Section 609.2 shall be a hand shower or shower spray unit located on the deck of or at the entrance of each pool.

C. Delete Section 3113 of the IBC in its entirety.

13VAC5-63-340. Chapter 33 Safeguards during construction.

A. Delete Section 3302.1 of the IBC.

B. Add Sections 3302.4 and 3302.5 to the IBC to read:

3302.4 Separations between construction areas. Separations used in Type I and Type II construction to separate construction areas from occupied portions of the building shall be constructed of materials that comply with one of the following:

1. Noncombustible materials.

2. Materials that exhibit a flame spread index not exceeding 25 when tested in accordance with ASTM E84 or UL 723.

3. Materials exhibiting a peak heat release rate not exceeding 300 kW/m^2 when tested in accordance with ASTM E1354 at an incident heat flux of 50 kW/m^2 in the horizontal orientation on specimens at the thickness intended for use.

3302.5 Fire safety requirements for buildings of Types IV-A, IV-B, and IV-C construction. Buildings of Types IV-A, IV-B, and IV-C construction designed to be greater than six stories above grade plane shall comply with the following requirements during construction unless otherwise approved by the building code official:

1. Standpipes shall be provided in accordance with Section 3311.

2. A water supply for fire department operations, as approved by the fire code official and the fire chief.

3. Where building construction exceeds six stories above grade plane and noncombustible protection is required by Section 602.4, at least one layer of noncombustible protection shall be installed on all building elements on floor levels, including mezzanines, more than four levels below active mass timber construction before additional floor levels can be erected.

Exception: Shafts and vertical exit enclosures shall not be considered part of the active mass timber construction.

4. Where building construction exceeds six stories above grade plane, required exterior wall coverings shall be installed on floor levels, including mezzanines, more than four levels below active mass timber construction before additional floor levels can be erected.

Exception: Shafts and vertical exit enclosures shall not be considered part of the active mass timber construction.

C. Delete IBC Sections 3303 and 3305 in their entirety.

~~C.~~ D. Change Section 3310.2 of the IBC to read:

3310.2 Maintenance of means of egress. Means of egress and required accessible means of egress shall be maintained at all times during construction.

E. Chance Section 3312.1 of the IBC to read:

3312.1 Completion before occupancy. In buildings where an automatic sprinkler system is required by this code, it shall be unlawful to occupy any portion of a building or structure until the automatic sprinkler system installation has been tested and approved, except as provided in Section 116.1.1.

F. Delete exception to Section 3313.1 and change Section 3313.1 of the IBC to read:

3313.1 Where required. An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible building materials arrive on the site, on commencement of vertical combustible construction, and on installation of a standpipe system in buildings under construction, in accordance with the Virginia Statewide Fire Prevention Code.

G. Delete Sections 3313.2, 3313.3, 3313.3.1, 3313.3.2, 3313.3.3, 3313.4, and 3313.5 of the IBC.

13VAC5-63-360. Chapter 35 Referenced standards.

~~Change~~ A. Add the following standards to the list of referenced standards in Chapter 35 of the IBC ~~as follows (standards not shown remain the same)~~:

Standard reference number	Title	~~Referenced in code section number~~
ASTM E329-02	Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction	~~1703.1, 1703.1.3~~

API 650-09	Welded Steel Tanks for Oil Storage	~~430.2~~
API 653-09	Tank Inspection, Repair, Alteration and Reconstruction	~~430.4, 430.5~~
NFPA 91-15	Standard for Exhaust Systems for Air Conveying of Vapors, Mists and Particulate Solids	~~428.3.7~~
~~ISPSC-18~~	~~International Swimming Pool and Spa Code~~	~~202, 3109.1, 3109.1.1~~
TFI RMIP-09	Aboveground Storage Tanks Containing Liquid Fertilizer, Recommended Mechanical Integrity Practices	~~430.2, 430.4, 430.5~~
UL 2075-13	Standard for Gas and Vapor Detectors and Sensors	~~915.4, 915.5.1, 915.5.3~~
ASCE/SEI 7-22	Minimum Design Loads and Associated Criteria for Buildings and Other Structures	

B. Delete the following standards from the list of referenced standards in Chapter 35 of the IBC:

Standard reference number	Title
ASCE/SEI 7-16	Minimum Design Loads and Associated Criteria for Buildings and Other Structures

13VAC5-63-400. Chapter 1 Administration; Section 101 General.

A. Section 101.1 Short title. The Virginia Uniform Statewide Building Code, Part II, Existing Buildings, may be cited as the "Virginia Existing Building Code" or as the "VEBC."

B. Section 101.2 Incorporation by reference. Chapters 2 - through 16 of the ~~2018~~ 2021 International Existing Building Code, published by the International Code Council, Inc., are adopted and incorporated by reference to be an enforceable part of the VEBC. The term "IEBC" means the ~~2018~~ 2021 International Existing Building Code, published by the International Code Council, Inc. Any codes and standards referenced in the IEBC are also considered to be part of the incorporation by reference, except that such codes and standards are used only to the prescribed extent of each such reference.

C. Section 101.3 Numbering system. A dual numbering system is used in the VEBC to correlate the numbering system of the Virginia Administrative Code with the numbering system of the IEBC. IEBC numbering system designations are provided in the catchlines of the Virginia Administrative Code sections and cross references between sections or chapters of the VEBC use only the IEBC numbering system designations. The term "chapter" is used in the context of the numbering system of the IEBC and may mean a chapter in the VEBC, a chapter in the IEBC or a chapter in a referenced code or standard, depending on the context of the use of the term. The term "chapter" is not used to designate a chapter of the Virginia Administrative Code, unless clearly indicated.

D. Section 101.4 Arrangement of code provisions. The VEBC is comprised of the combination of (i) the provisions of Chapter 1, Administration, which are established herein, (ii) Chapters 2 - through 16 of the IEBC, which are incorporated by reference in Section 101.2, and (iii) the changes to the text of the incorporated chapters of the IEBC that are specifically identified, including any new chapters added. The terminology "changes to the text of the incorporated chapters of the IEBC that are specifically identified, including any new chapters added" shall also be referred to as the "state amendments to the IEBC." Such state amendments to the IEBC are set out using corresponding chapter and section numbers of the IEBC numbering system. In addition, since Chapter 1 of the IEBC is not incorporated as part of the VEBC, any reference to a provision of Chapter 1 of the IEBC in the provisions of Chapters 2 - through 16 of the IEBC is generally invalid. However, where the purpose of such a reference would clearly correspond to a provision of Chapter 1 established ~~herein~~ in this section, then the reference may be construed to be a valid reference to such corresponding Chapter 1 provision.

E. Section 101.5 Use of terminology and notes. The provisions of this code shall be used as follows:

1. The term "this code," or "the code," where used in the provisions of Chapter 1, in Chapters 2 - through 16 of the IEBC, or in the state amendments to the IEBC, means the VEBC, unless the context clearly indicates otherwise.

2. The term "this code," or "the code," where used in a code or standard referenced in the VEBC, means that code or standard, unless the context clearly indicates otherwise.

3. The term "USBC" where used in this code, means the VCC, unless the context clearly indicates otherwise.

4. The use of notes in Chapter 1 is to provide information only and shall not be construed as changing the meaning of any code provision.

5. Notes in the IEBC, in the codes and standards referenced in the IEBC, and in the state amendments to the IEBC~~,~~ may modify the content of a related provision and shall be considered to be a valid part of the provision, unless the context clearly indicates otherwise.

6. References to International Codes and standards, where used in this code, include state amendments made to those International Codes and standards in the VCC.

Note: See Section 101.2 of the VCC for a list of major codes and standards referenced in the VCC.

F. Section 101.6 Order of precedence. The provisions of this code shall be used as follows:

1. The provisions of Chapter 1 of this code supersede any provisions of Chapters 2 - through 16 of the IEBC that address the same subject matter and impose differing requirements.

2. The provisions of Chapter 1 of this code supersede any provisions of the codes and standards referenced in the IEBC that address the same subject matter and impose differing requirements.

3. The state amendments to the IEBC supersede any provisions of Chapters 2 - through 16 of the IEBC that address the same subject matter and impose differing requirements.

4. The state amendments to the IEBC supersede any provisions of the codes and standards referenced in the IEBC that address the same subject matter and impose differing requirements.

5. The provisions of Chapters 2 - through 16 of the IEBC supersede any provisions of the codes and standards referenced in the IEBC that address the same subject matter and impose differing requirements.

G. Section 101.7 Administrative provisions. The provisions of Chapter 1 establish administrative requirements, which include ~~but are not limited to~~ provisions relating to the scope and enforcement of the code. Any provisions of Chapters 2 - through 16 of the IEBC or any provisions of the codes and standards referenced in the IEBC that address the same subject matter to a lesser or greater extent are deleted and replaced by the provisions of Chapter 1. Further, any administrative requirements contained in the state amendments to the IEBC shall be given the same precedence as the provisions of Chapter 1. Notwithstanding the ~~above~~ provisions in this subsection, where administrative requirements of Chapters 2 - through 16 of the IEBC or of the codes and standards referenced in the IEBC are specifically identified as valid administrative requirements in Chapter 1 of this code or in the state amendments to the IEBC, then such requirements are not deleted and replaced.

Note: The purpose of this provision is to eliminate overlap, conflicts, and duplication by providing a single standard for administrative, procedural, and enforcement requirements of this code.

H. Section 101.8 Definitions. The definitions of terms used in this code are contained in Chapter 2 along with specific provisions addressing the use of definitions. Terms may be defined in other chapters or provisions of the code and such definitions are also valid.

13VAC5-63-410. Section 102 Purpose and scope.

A. Section 102.1 Purpose. In accordance with § 36-99.01 of the Code of Virginia, the General Assembly of Virginia has declared that (i) there is an urgent need to improve the housing conditions of low and moderate income individuals and families, many of whom live in substandard housing, particularly in the older cities of the Commonwealth; (ii) there are large numbers of older residential buildings in the Commonwealth, both occupied and vacant~~, which~~ that are in urgent need of rehabilitation and must be rehabilitated if the state's citizens are to be housed in decent, sound, and sanitary conditions; and (iii) the application of those building code requirements currently in force to housing rehabilitation has sometimes led to the imposition of costly and time-consuming requirements that result in a significant reduction in the amount of rehabilitation activity taking place.

The General Assembly further declares that (i) there is an urgent need to improve the existing condition of many of the Commonwealth's stock of commercial properties, particularly in older cities; (ii) there are large numbers of older commercial buildings in the Commonwealth, both occupied and vacant, that are in urgent need of rehabilitation and that must be rehabilitated if the citizens of the Commonwealth are to be provided with decent, sound, and sanitary work spaces; and (iii) the application of the existing building code to such rehabilitation has sometimes led to the imposition of costly and time-consuming requirements that result in a significant reduction in the amount of rehabilitation activity taking place.

B. Section 102.2 Scope. The provisions of this code shall govern construction and rehabilitation activities in existing buildings and structures.

C. 102.2.1 ~~Change of occupancy to~~ Group I-2 or I-3 applicability. A change of occupancy to Group I-2 or I-3 from another occupancy classification shall comply with the provisions of the VCC as required for new construction, not Chapter 7 of this code. All other provisions of the VEBC, including change of occupancy within an existing Group I-2 or I-3 classification, are applicable to Group I-2 or I-3. ~~Written application shall be made to the local building department for a new certificate of occupancy, and the new certificate of occupancy shall be obtained prior to the change of occupancy. When impractical to achieve compliance with the VCC for the new occupancy classification, the building official shall consider modifications upon application and as provided for in Section 106.3 of the VCC.~~

D. 102.2.2 Reconstruction, alteration, or repair in Group R-5 occupancies. Compliance with this section shall be an acceptable alternative to compliance with this code at the discretion of the owner or owner's agent. The VCC may be used for the reconstruction, alteration, or repair of Group R-5 buildings or structures subject to the following criteria:

1. Any reconstruction, alteration, or repair shall not adversely affect the performance of the building or structure~~,~~ or cause the building or structure to become unsafe or lower existing levels of health and safety.

2. Parts of the building or structure not being reconstructed, altered, or repaired shall not be required to comply with the requirements of the VCC applicable to newly constructed buildings or structures.

3. The installation of material ~~or~~, equipment, or both~~,~~ that is neither required nor prohibited shall only be required to comply with the provisions of the VCC relating to the safe installation of such material or equipment.

4. Material ~~or~~, equipment, or both~~,~~ may be replaced in the same location with material or equipment of a similar kind ~~of~~ or capacity.

5. In accordance with § 36-99.2 of the Code of Virginia, installation or replacement of glass shall comply with Section R308 or Chapter 24 of the VCC.

Exceptions:

1. This section shall not be construed to permit noncompliance with any applicable flood load or flood-resistant construction requirements of the VCC.

2. Reconstructed decks, balconies, porches, and similar structures located 30 inches (762 mm) or more above grade shall meet the current code provisions for structural loading capacity, connections, and structural attachment. This requirement excludes the configuration and height of handrails and guardrails.

3. Repair or replacement of smoke alarms shall be with devices listed in accordance with UL217 and that are no more than 10 years from the date of manufacture. Battery-only powered devices shall be powered by a 10-year sealed battery.

E. 102.2.3 Additions. Where one or more newly constructed fire walls that comply with Section 706 of the VCC is provided between an addition and the existing building ~~or~~, structure, or portions thereof, the addition shall be considered a separate building, and therefore, not an addition within the scope of this code. Such separate building, including the fire wall, shall be constructed in accordance with the VCC and shall not place the existing building or structure in nonconformance with the building code under which the existing building ~~or~~, structure, or the affected portions thereof was built~~,~~ or as previously approved.

13VAC5-63-420. Section 103 Application of code.

A. Section 103.1 General. All administrative provisions of the VCC, including requirements for permits, inspections, and approvals by the local building department, provisions for appeals from decisions of the local building department, and the issuance of modifications, are applicable to the use of this code, except where this code sets out differing requirements. Where there is a conflict between a general requirement and a specific requirement in the VEBC, the specific requirement shall govern.

B. Section 103.1.1 Use of performance code. Compliance with the provisions of a nationally recognized performance code when approved as a modification shall be considered to constitute compliance with this code. All documents submitted as part of such consideration shall be retained in the permanent records of the local building department.

C. Section 103.1.2 Preliminary meeting. When requested by a prospective permit applicant or when determined necessary by the code official, the code official shall meet with the prospective permit applicant prior to the application for a permit to discuss plans for the proposed work or change of occupancy in order to establish the specific applicability of the provisions of this code.

D. Section 103.2 Change of occupancy. ~~Prior to a change of occupancy of the building or structure, the owner or the owner's agent shall make written application to the local building department for a new certificate of occupancy and shall obtain the new certificate of occupancy.~~ A building or structure undergoing a change of occupancy shall comply with the provisions of this code for change of occupancy, except as provided for in Section 102.2.1 for Group I-2 or I-3. Permitting, inspections, and certificate of occupancy issuance shall be in accordance with the administrative provisions of the VCC.

When impractical to achieve compliance with this code for the new occupancy, the building official shall consider modifications upon application and as provided for in Section 106.3 of the VCC.

E. Section 103.3 Retrofit requirements. The local building department shall enforce the provisions of Section 1101 that require certain existing buildings to be retrofitted with fire protection systems and other safety equipment. Retroactive fire protection system requirements contained in the IFC shall not be applicable unless required for compliance with the provisions of Section 1101.

F. Section 103.4 Nonrequired equipment. The following criteria for nonrequired equipment are in accordance with § 36-103 of the Code of Virginia. Building owners may elect to install partial or full fire alarms or other safety equipment that was not required by the edition of the VCC in effect at the time a building was constructed without meeting current requirements of the code, provided the installation does not create a hazardous condition. Permits for installation shall be obtained in accordance with the VCC. In addition, as a requirement of this code, when such nonrequired equipment is to be installed, the building official shall notify the appropriate fire official or fire chief.

G. Section 103.4.1 Reduction in function or discontinuance of nonrequired fire protection systems. When a nonrequired fire protection system is to be reduced in function or discontinued, it shall be done in such a manner so as not to create a false sense of protection. Generally, in such cases, any features visible from interior areas shall be removed, such as sprinkler heads, smoke detectors, or alarm panels or devices, but any wiring or piping hidden within the construction of the building may remain. Approval of the proposed method of reduction or discontinuance shall be obtained from the building official.

H. Section 103.5 Requirements relating to maintenance. Any requirements of the IEBC requiring the maintenance of existing buildings or structures are invalid.

Note: Requirements for the maintenance of existing buildings and structures and for unsafe conditions are contained in the VMC.

I. Section 103.6 Use of Appendix A. Appendix A of the IEBC provides guidelines for the seismic retrofit of existing buildings. The use of this appendix is not mandatory but shall be permitted to be utilized at the option of an owner, the owner's agent, or the ~~RDP~~ registered design professional involved in a rehabilitation project. However, in no case shall the use of Appendix A be construed to authorize the lowering of existing levels of health or safety in buildings or structures being rehabilitated.

J. Section 103.7 Use of Appendix B. Appendix B of the IEBC provides supplementary accessibility requirements for existing buildings and facilities. All applicable requirements of Appendix B shall be met in buildings and structures being rehabilitated.

K. Section 103.8 Use of Resource A. Resource A of the IEBC provides guidelines for the evaluation of fire resistance ratings of archaic materials and may be used in conjunction with rehabilitation projects.

L. 103.9 Construction documents. Construction documents shall be submitted with the application for a permit. The work proposed to be performed on an existing building or structure shall be classified on the construction documents as repairs, alterations, change of occupancy, addition, historic building, or moved building. Alterations shall further be classified as Level 1 or Level 2. Any required elevation certificate shall be prepared by a certified land surveyor or registered professional civil engineer licensed in Virginia.

Exception: Construction documents or classification of the work does not need to be submitted when the building official determines the proposed work does not require such documents, classification, or identification.

13VAC5-63-430. Chapter 2 Definitions.

A. Change Section 201.3 of the IEBC to read:

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the other International Codes, such terms shall have the meanings ascribed to them in those codes, except that terms that are not defined in this code and that are defined in the VCC shall take precedence over other definitions.

B. Change the following definitions in Section 202 of the IEBC to read:

Building. A combination of materials, whether portable or fixed, having a roof to form a structure for the use or occupancy by persons or property. The word "building" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Building" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Commonwealth Transportation Board.

Change of occupancy. Either of the following shall be considered a change of occupancy where the current VCC requires a greater degree of ~~accessibility,~~ structural strength, fire protection, means of egress, ventilation, or sanitation than is existing in the current building or structure:

1. Any change in the occupancy classification of a building or structure.

2. Any change in the purpose of, or a change in the level of activity within, a building or structure.

Note: The use and occupancy classification of a building or ~~structure,~~ shall be determined in accordance with Chapter 3 of the VCC.

Existing building. A building for which a legal certificate of occupancy has been issued under any edition of the USBC or approved by the building official when no legal certificate

of occupancy exists~~,~~ and that has been occupied for its intended use~~;~~ or~~,~~ a building built prior to the initial edition of the USBC.

Existing structure. A structure (i) for which a legal building permit has been issued under any edition of the USBC, (ii) that has been previously approved, or (iii) that was built prior to the initial edition of the USBC. For application of provisions in flood hazard areas, an existing structure is any building or structure for which the start of construction commenced before the effective date of the community's first flood plain management code, ordinance, or standard.

C. Add the following definitions to Section 202 of the IEBC to read:

Moved building or structure. An existing building or structure that is moved to a new location.

Roof covering. The covering applied to the roof deck or spaced supports for weather resistance, energy performance, fire classification, or appearance.

Structure. An assembly of materials forming a construction for occupancy or use, including stadiums, gospel and circus tents, reviewing stands, platforms, stagings, observation towers, radio towers, water tanks, storage tanks (underground and aboveground), trestles, piers, wharves, swimming pools, amusement devices, storage bins, and other structures of this general nature but excluding water wells. The word "structure" shall be construed as though followed by the words "or part or parts thereof" unless the context clearly requires a different meaning. "Structure" shall not include roadway tunnels and bridges owned by the Virginia Department of Transportation, which shall be governed by construction and design standards approved by the Virginia Commonwealth Transportation Board.

D. Delete the following definitions from Section 202 of the IEBC:

Approved

Dangerous

Deferred submittal

Facility

Flood hazard area

Registered design professional in responsible charge

Relocatable building

Roof repair

Unsafe

Work area

13VAC5-63-431. Chapter 3 General provisions and special detailed requirements.

Replace Chapter 3 of the IEBC with the following:

~~A. Change IEBC~~ 1. Section 301 ~~to~~ General.

~~B. Change Section 301.1 of the IEBC to read:~~

301.1 Applicability. The applicable provisions of this chapter shall be used in conjunction with the requirements in this code~~,~~ and shall apply to all construction and rehabilitation.

~~C. Change Section 301.2 to the IEBC to read:~~

301.2 Occupancy and use. When determining the appropriate application of the referenced sections of this code, the occupancy and use of a building shall be determined in accordance with Chapter 3 of the VCC.

~~D. Change IEBC~~ 2. Section 302 ~~to~~ Building Materials and Systems.

~~E. Change Sections 302.1 through 302.3 of the IEBC to read:~~

302.1 New and replacement materials. Except as otherwise required or permitted by this code, materials permitted by the applicable code for new construction shall be used. Like materials shall be permitted for repairs and alterations, provided no hazard to life, health, or property is created. Hazardous materials shall not be used where the VCC would not permit ~~their~~ hazardous materials use in buildings or structures of similar occupancy, purpose, and location.

302.2 Existing seismic force-resisting systems. Where the existing seismic force-resisting system is a type that can be designated ordinary, values of R, Ω_0, and C_d for the existing seismic force-resisting system shall be those specified by the VCC for an ordinary system unless it is demonstrated that the existing system will provide performance equivalent to that of a detailed, intermediate, or special system.

302.3 Smoke alarms. Repair or replacement of smoke alarms shall be with devices listed in accordance with UL217 and that are no more than 10 years from the date of manufacture. Battery-only powered devices shall be powered by a 10-year sealed battery.

~~F. Delete Sections 302.3 through 302.6 of the IEBC.~~

~~G. Change IEBC~~ 3. Section 303 ~~to~~ Fire escapes.

~~H. Change Sections 303.1 through 303.3.2, including subsections, and add Sections 303.4 through 303.6 to the IEBC to read~~:

303.1 Where permitted. Fire escapes shall comply with this section and shall not constitute more than 50% of the required number of exits nor more than 50% of the required exit capacity.

303.1.1 Existing fire escapes. Existing fire escapes shall continue to be accepted as a component in the means of egress.

303.1.2 New fire escapes. For other than Group I-2, newly constructed fire escapes shall be permitted only where exterior stairs cannot be utilized due to lot lines limiting stair size or due to the sidewalks, alleys, or roads at grade level.

Exception: Replacement fire escapes or existing fire escapes undergoing repairs shall comply with Sections 303.3 and 303.4 if feasible, and if not feasible, to the greatest extent possible.

303.2 Location. Where located on the front of the building and where projecting beyond the building line, the lowest landing shall not be less than ~~7~~ seven feet (2134 mm) or more than 12 feet (3658 mm) above grade~~,~~ and shall be equipped with a counterbalanced stairway to the street. In alleyways and thoroughfares less than 30 feet (9144 mm) wide, the clearance under the lowest landing shall not be less than 12 feet (3658 mm).

303.3 Construction. The fire escape shall be designed to support a live load of 100 pounds per square foot (4788 Pa) and shall be constructed of steel or other approved noncombustible materials. Fire escapes constructed of wood not less than nominal ~~2~~ two inches (51 mm) thick are permitted on buildings of Type V construction. Walkways and railings located over or supported by combustible roofs in buildings of Types III and IV construction are permitted to be of wood not less than nominal ~~2~~ two inches (51 mm) thick.

303.4 Dimensions. Stairs shall be at least 22 inches (559 mm) wide with risers not more than, and treads not less than, ~~8~~ eight inches (203 mm) and landings at the foot of stairs not less than 40 inches (1016 mm) wide by 36 inches (914 mm) long, located not more than ~~9~~ nine inches (203 mm) below the door.

303.5 Opening protectives. Openings within 10 feet (3048 mm) of newly constructed fire escape stairways shall be protected by fire assemblies having minimum 3/4-hour-fire-resistance ratings.

Exception: Opening protection shall not be required in buildings equipped throughout with an approved automatic sprinkler system.

303.6 Fire escape access and details. Newly constructed fire escapes shall comply with all of the following requirements:

1. Occupants shall have unobstructed access to the fire escape without having to pass through a room subject to locking.

2. Access to a new fire escape shall be through a door, except that windows shall be permitted to provide access from single dwelling units or sleeping units in Groups R-1, R-2, and I-1 occupancies or to provide access from spaces having a maximum occupant load of 10 in other occupancy classifications.

2.1. The window shall have a minimum net clear opening of 5.7 square feet (0.53 m^2) or ~~5~~ five square feet (0.46 m^2) where located at grade.

2.2. The minimum net clear opening height shall be 24 inches (610 mm) and net clear opening width shall be 20 inches (508 mm).

2.3. The bottom of the clear opening shall not be greater than 44 inches (1118 mm) above the floor.

2.4. The operation of the window shall comply with the operational constraints of the VCC.

3. In all buildings of Group E occupancy, up to and including the 12th grade, buildings of Group I occupancy, rooming houses, and child care centers, ladders of any type are prohibited on fire escapes used as a required means of egress.

~~I. Change~~ 4. Section 304 ~~to~~ Glass replacement and replacement windows.

~~J. Change Section 304.1 and add Sections 304.2 through 304.3.1 to the IEBC to read:~~

304.1 Replacement glass. In accordance with § 36-99.2 of the Code of Virginia, installation or replacement of glass shall comply with Chapter 24 of the VCC.

304.2 Replacement window opening devices. In Group R-2 or R-3 buildings containing dwelling units, window opening control devices complying with ASTM F 2090 shall be installed where an existing window is replaced and where all of the following apply to the replacement window:

1. The window is operable;

2. The window replacement includes replacement of the sash and the frame;

3. The top of the sill of the window opening is at a height less than 36 inches (915 mm) above the finished floor;

4. The window will permit openings that will allow passage of a ~~4 inch~~ four-inch diameter (102 mm) sphere when the window is in its largest opened position; and

5. The vertical distance from the top of the sill of the window opening to the finished grade or other surface below, on the exterior of the building, is greater than 72 inches (1829 mm).

The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section ~~1029.2~~ 1031.3.1 of the VCC.

Exceptions:

1. Operable windows where the top of the sill of the window opening is located more than 75 feet (22 860 mm) above the finished grade or other surface below, on the

exterior of the room, space, or building, and that are provided with window fall prevention devices that comply with ASTM F 2006.

2. Operable windows with openings that are provided with window fall prevention devices that comply with ASTM F 2090.

304.3 Replacement window emergency escape and rescue openings. Where windows are required by the VCC or International Residential Code to provide emergency escape and rescue openings in Groups R-2 and R-3 occupancies and one-family and two-family dwellings and townhouses regulated by the International Residential Code, replacement windows shall be exempt from the requirements of Sections ~~1030.2, 1030.3, and 1030.4~~ 1031.2.1 and 1031.3 of the VCC or Sections R310.1.1, R310.2.1, R310.2.2, ~~and~~ R310.2.3, R310.4.1, R310.4.2, R310.4.2.1, R310.4.2.2, and R310.4.3 of the International Residential Code, provided the replacement window meets the following conditions:

1. The replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be permitted to be of the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

2. The replacement of the window is not part of a change of occupancy.

304.3.1 Operational constraints. Where bars, grilles, grates, or similar devices are installed over emergency escape and rescue openings as permitted by Section ~~1030.4~~ 1031.2.1 of the VCC, smoke alarms shall also be provided in accordance with Section 907.2.11 of the VCC. In R-5 occupancies, bars, grilles, grates, or similar devices are permitted to be installed over emergency escape and rescue openings in accordance with Section R310.4.4 of the VRC.

~~K. Change~~ 5. Section 305 Seismic force-resisting systems.

~~L. Change Sections 305.1 and 305.2, including subsections, to the IEBC to read:~~

305.1 General. Where this code requires consideration of the seismic force-resisting system of an existing building subject to repair, alteration, change of occupancy, addition, or moving of existing buildings, the seismic evaluation and design shall be based on Section 305.2.

305.2 Seismic evaluation and design procedures. The seismic evaluation and design shall be based on the procedures specified in the VCC or ASCE 41. The procedures contained in Appendix A of this code shall be permitted to be used as specified in Section 305.2.2.

305.2.1 Compliance with VCC-level seismic forces. Where compliance with the seismic design provisions of the VCC is required, the criteria shall be in accordance with one of the following:

1. 100% of the values in the VCC. Where the existing seismic force-resisting system is a type that can be designated as "Ordinary," values of R, Ω_0, and C_d used for analysis in accordance with Chapter 16 of the VCC shall be those specified for structural systems classified as "Ordinary" in accordance with Table 12.2-1 of ASCE 7, unless it can be demonstrated that the structural system will provide performance equivalent to that of a "Detailed," "Intermediate" or "Special" system.

2. ASCE 41, using a Tier 3 procedure and the two level performance objective in Table 305.2.1 for the applicable risk category.

Table 305.2.1
Performance Objectives for Use in ASCE 41 for Compliance with
VCC-Level Seismic Forces

Risk Category (Based on VCC Table 1604.5)	Structural Performance Level for Use with BSE-1E Earthquake Hazard Level	Structural Performance Level for Use with BSE-2N Earthquake Hazard Level
I	Life Safety (S-3)	Collapse Prevention (S-5)
II	Life Safety (S-3)	Collapse Prevention (S-5)
III	Damage Control (S-2)	Limited Safety (S-4)
IV	Immediate Occupancy (S-1)	Life Safety (S-3)

305.2.2 Compliance with reduced VCC-level seismic forces. Where seismic evaluation and design is permitted to meet reduced VCC seismic force levels, the criteria used shall be in accordance with one of the following:

1. The VCC using 75% of the prescribed forces. Values of R, Ω_0 and C_d used for analysis shall be as specified in Section 305.2.1 of this code.

2. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A as specified in Items 2.1 through 2.5 and subject to the limitations of the respective Appendix A chapters shall be deemed to comply with this section.

2.1. The seismic evaluation and design of unreinforced masonry bearing wall buildings in Risk Category I or II are permitted to be based on the procedures specified in Appendix Chapter A1.

2.2. Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforced masonry wall buildings with flexible diaphragms in Risk Category I or II are permitted to be based on the procedures specified in Chapter A2.

2.3. Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame

wood construction in Risk Category I or II are permitted to be based on the procedures specified in Chapter A3.

2.4. Seismic evaluation and design of soft, weak, or open-front wall conditions in ~~multiunit~~ multi-unit residential buildings of wood construction in Risk Category I or II are permitted to be based on the procedures specified in Chapter A4.

2.5. Seismic evaluation and design of concrete buildings assigned to Risk Category I, II, or III are permitted to be based on the procedures specified in Chapter A5.

3. ASCE 41, using the performance objective in Table 305.2.2 for the applicable risk category.

Table 305.2.2

Performance Objectives for Use in ASCE 41 for Compliance with Reduced VCC-Level Seismic Forces

Risk Category (Based on VCC Table 1604.5)	Structural Performance Level for Use with BSE-1E Earthquake Hazard Level
I	Life Safety (S-3)
II	Life Safety (S-3)
III	Damage Control (S-2[a])
IV	Immediate Occupancy (S-1)

a. Tier 1 evaluation at the Damage Control performance level shall use the Tier 1 Life Safety checklists and Tier 1 Quick Check provision midway between those specified for Life Safety and Immediate Occupancy performance

~~M. Delete Sections 305.3 through 305.9, including subsections, of the IEBC.~~

~~N. Add IEBC~~ 6. Section 306 Higher education laboratories.

~~O. Add Section 306.1, including subsections, to the IEBC to read:~~

306.1 Change of occupancy in existing higher education laboratories. Where the use of new or different hazardous materials or a change in the amount of hazardous materials in existing higher education laboratories would constitute a change of occupancy, this section shall be permitted to be used as an acceptable alternative to compliance with change of occupancy requirements to permit the increased amounts of hazardous materials stipulated without the laboratories being classified as Group H. In addition, such laboratories shall comply with the applicable operational and maintenance requirements in Chapter 38 of the SFPC. Approval under this section is contingent upon operational requirements in the SFPC being complied with and maintained.

306.1.1 Hazardous materials in existing higher education laboratories. The percentage of maximum allowable quantities of hazardous materials per control area and the number of control areas permitted at each floor level within an existing building shall be permitted to comply with Table 302.6.1(1) in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC or shall be permitted to comply with Table 302.6.1(2) in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC.

Table 306.1.1(1)

Design and Number of Control Areas in Existing Buildings Equipped throughout with an Automatic Sprinkler System in Accordance with Section 903.3.1.1 of the VCC with Higher Education Laboratories

Floor Level		Percentage of the Maximum Allowable Quantity per Control Area[a]	Number of Control Areas per Floor	Fire-Resistance Rating for Fire Barriers and Horizontal Assemblies in Hours[b]
Above Grade Plane	Higher than 20	5	1	2
	10-20	10	1	2
	7-9	25	2	2
	4-6	50	2	2
	3	75	2	1
	2	100	3	1
	1	100	4	1
Below Grade Plane	1	75	3	1
	2	50	2	1
	Lower than 2	Not Allowed	Not Allowed	Not Allowed

a. Percentage shall be of the maximum allowable quantity per control area shown in Tables 307.1(1) and 307.1(2) of the VCC, with all increases allowed in the notes to those tables.

b. Separation shall include fire barriers and horizontal assemblies as necessary to provide separation from other portions of the building.

Table 306.1.1(2)

Design and Number of Control Areas in Existing Buildings Not Equipped throughout with an Automatic Sprinkler System in Accordance with Section 903.3.1.1 of the VCC with Higher Education Laboratories

Floor Level	Percentage of the Maximum Allowable Quantity	Number of Control Areas per Floor	Fire-Resistance Rating for Fire Barriers and Horizontal

		per Control Area[a]		Assemblies in Hours[b]
Above Grade Plane	Higher than 9	5	1	2
	7-9	10	2	2
	4-6	25	2	2
	3	75	2	1
	2	100	3	1
	1	100	4	1
Below Grade Plane	1	75	3	1
	2	50	2	1
	Lower than 2	Not Allowed	Not Allowed	Not Allowed

a. Percentage shall be of the maximum allowable quantity per control area shown in Tables 307.1(1) and 307.1(2) of the VCC, with all increases allowed in the notes to those tables.

b. Separation shall include fire barriers and horizontal assemblies as necessary to provide separation from other portions of the building.

306.1.2 Automatic fire alarm and detection systems. A fire alarm system shall be provided throughout the building in accordance with Section 907 of the VCC. An automatic fire detection system shall be provided in the control area in accordance with Section 907 of the VCC where the building is not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC.

306.1.3 System supervision and monitoring. Automatic fire alarm and detection systems shall be electronically supervised and monitored by an approved supervising station or, where approved, shall initiate an audible and visual signal at a constantly attended onsite location.

306.1.4 Restricted materials in storage and use. Where approved by the building official, the storage and use of the following hazardous materials prohibited by VCC Table 307.1(1) in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 shall be allowed within a control area at 25% of Table 307.1(1) limits for a building equipped throughout with an automatic sprinkler system:

1. Pyrophorics.

2. Class 4 oxidizers.

No additional quantity increases shall be allowed. All such materials shall be stored and used in accordance with Sections 3805.2.1 and 3805.2.2 of the SFPC.

~~P. Add IEBC Section 307 Reroofing and roof repair.~~

13VAC5-63-432.5. Chapter 4 Accessibility.

Replace Chapter 4 of the IEBC with the following:

~~A. Change Section 401.1 of the IEBC to read:~~

1. Section 401 General

401.1 Scope. The applicable provisions of this chapter shall apply to all construction and rehabilitation.

~~B. Delete Sections 401.2 through 401.3 of the IEBC.~~

~~C. Change IEBC~~ 2. Section 402 ~~to~~ Change of Occupancy.

~~D. Change Section 402.1 of the IEBC to read:~~

402.1 Change of occupancy. Existing buildings or structures that undergo a change of occupancy are not required to be provided with additional accessibility features. Any alterations undertaken in connection with a change of occupancy shall conform to the applicable requirements of Section 404.

~~E. Change IEBC~~ 3. Section 403 ~~to~~ Additions.

~~F. Change Section 403.1 of the IEBC to read:~~

403.1 Additions. Accessibility provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, a primary function shall comply with the requirements in Section 404.3, as applicable.

~~G. Add Sections 403.2 through 403.4 to the IEBC to read:~~

403.2 Accessible dwelling units and sleeping units. Where Group I-1, I-2, I-3, R-1, R-2, or R-4 dwelling or sleeping units are being added, the requirements of Section ~~1107~~ 1108 of the VCC for accessible units apply only to the quantity of spaces being added.

403.3 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being added, the requirements of Section ~~1107~~ 1108 of the VCC for Type A units and Chapter 9 of the VCC for visible alarms apply only to the quantity of the spaces being added.

403.4 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3, or R-4 dwelling or sleeping units are being added, the requirements of Section ~~1107~~ 1108 of the VCC for Type B units and Chapter 9 of the VCC for visible alarms apply only to the quantity of spaces being added.

~~H. Change IEBC~~ 4. Section 404 ~~to~~ Alterations.

~~I. Change Section 404.1 of the IEBC to read:~~

404.1 General. An alteration of an existing facility shall not impose a requirement for greater accessibility than that which would be required for new construction. Alterations shall not reduce or have the effect of reducing accessibility of a facility or portion of a facility.

~~J. Add Sections 404.2 through 404.4.15, including subsections, to the IEBC to read:~~

404.2 Alterations. A facility that is altered shall comply with the applicable provisions in this section and Chapter 11 of the VCC, except as modified by Sections 404.3 and 404.4, unless technically infeasible. Where compliance with this section is technically infeasible, the alteration shall provide access to the maximum extent technically feasible.

Exceptions:

1. The altered element or space is not required to be on an accessible route, unless required by Section 404.3.

2. Accessible means of egress required by Chapter 10 of the VCC are not required to be provided in existing facilities.

3. The alteration to Type A individually owned dwelling units within a Group R-2 occupancy shall be permitted to meet the ~~provision~~ provisions for a Type B dwelling unit.

404.3 Alterations affecting an area containing a primary function. Where an alteration affects or could affect the usability of or access to an area containing a primary function, the route to the primary function area shall be accessible. ~~The accessible route to the primary function area shall include toilet~~ Toilet facilities and drinking fountains ~~that shall also be accessible to and useable by individuals with disabilities,~~ serving the area of primary function, including the route from the area of primary function to these facilities, shall be accessible.

Exceptions:

1. The cumulative costs of providing the accessible route, toilet facilities, and drinking fountains are not required to exceed 20% of the costs of the alterations affecting the area of primary function.

2. This provision does not apply to alterations limited solely to windows, hardware, operating controls, electrical outlets, and signs.

3. This provision does not apply to alterations limited solely to mechanical systems, electrical systems, installation, or alteration of fire protection systems and abatement of hazardous materials.

4. This provision does not apply to alterations undertaken for the primary purpose of increasing the accessibility of a facility.

5. This provision does not apply to altered areas limited to Type B dwelling and sleeping units.

404.4 Scoping for alterations. The provisions of Sections 404.4.1 through 404.1.15 shall apply to alterations to existing buildings and facilities.

404.4.1 Entrances. Where an alteration includes alterations to an entrance~~,~~ and the facility has an accessible entrance on an accessible route, the altered entrance is not required to be accessible unless required by Section 404.3. Signs complying with Section ~~1111~~ 1112 of the VCC shall be provided.

Exception: Where an alteration includes alterations to an entrance~~,~~ and the facility has an accessible entrance, the altered entrance is not required to be accessible, unless required by Section 404.3. Signs complying with Section ~~1111~~ 1112 of the VCC shall be provided.

404.4.2 Elevators. Altered elements of existing elevators shall comply with ASME A17.1/CSA B44 and ICC A117.1. Such elements shall also be altered in elevators programmed to respond to the same hall call control as the altered elevator.

404.4.3 Platform lifts. Platform (wheelchair) lifts complying with ICC A117.1 and installed in accordance with ASME A18.1 shall be permitted as a component of an accessible route.

404.4.4 Stairways and escalators. Where an escalator or stairway is added where none existed previously and major structural modifications are necessary for installation, an accessible route shall be provided between the levels served by the escalator or stairways in accordance with Section 1104.4 of the VCC.

404.4.5 Ramps. Where steeper slopes than allowed by Section 1012.2 of the VCC are necessitated by space limitations, the slope of ramps in or providing access to existing facilities shall comply with Table 404.4.5.

Table 404.4.5
Ramps

Slope	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches
Steeper than 1:12 but not steeper than 1:10	6 inches

For SI: 1 inch = 25.4 mm

404.4.6 Accessible dwelling or sleeping units. Where Group I-1, I-2, I-3, R-1, R-2, or R-4 dwelling or sleeping units are being altered, the requirements of Section ~~1107~~ 1108 of the VCC for Accessible units apply only to the quantity of the spaces being altered.

404.4.7 Type A dwelling or sleeping units. Where more than 20 Group R-2 dwelling or sleeping units are being altered, the requirements of Section ~~1107~~ 1108 of the VCC for Type A units and Chapter 9 of the VCC for visible alarms apply only to the quantity of the spaces being altered.

404.4.8 Type B dwelling or sleeping units. Where four or more Group I-1, I-2, R-1, R-2, R-3, or R-4 dwelling or sleeping units are being altered, the requirements of Section ~~1107~~ 1108 of the VCC for Type B units and

Chapter 9 of the VCC for visible alarms apply only to the quantity of the spaces being altered.

Exceptions: Groups I-1, I-2, R-2, R-3, and R-4 dwelling or sleeping units where the first certificate of occupancy was issued before March 15, 1991, are not required to provide Type B dwelling or sleeping units.

404.4.9 Jury boxes and witness stands. In alterations, accessible wheelchair spaces are not required to be located within the defined area of raised jury boxes or witness stands and shall be permitted to be located outside these spaces where ramp or lift access poses a hazard by restricting or projecting into a required means of egress.

404.4.10 Toilet and bathing rooms. Where it is technically infeasible to alter existing toilet and bathing rooms to be accessible, an accessible single-user ~~or~~, family, or assisted-use toilet or bathing room constructed in accordance with Section ~~1109.2.1~~ 1110.2.1 of the VCC is permitted. The single-user ~~or~~, family, or assisted-use toilet or bathing room shall be located on the same floor and in the same area as the existing toilet or bathing rooms. ~~At~~ Directional signs shall be provided at the inaccessible toilet and bathing rooms~~, provide directional signs~~ indicating the location of the nearest single-user ~~or~~, family, or assisted-use toilet room or bathing room. These directional signs shall include the International Symbol of Accessibility and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

404.4.10.1 Additional toilet and bathing facilities. In assembly and mercantile occupancies, where additional toilet fixtures are added, not fewer than one accessible family or assisted-use toilet room shall be provided where required by Section ~~1109.2.1~~ 1110.2.1 of the International Building Code. In recreational facilities, where additional bathing rooms are being added, not fewer than one family or assisted-use bathing room shall be provided where required by Section ~~1109.2.1~~ 1110.2.1 of the International Building Code.

404.4.11 Dressing, fitting, and locker rooms. Where it is technically infeasible to provide accessible dressing, fitting, or locker rooms at the same location as similar types of rooms, one accessible room on the same level shall be provided. Where separate-sex facilities are provided, accessible rooms for each sex shall be provided. Separate sex facilities are not required where only unisex rooms are provided.

404.4.12 Fuel dispensers. Operable parts of replacement fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum, measuring from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

404.4.13 Thresholds. The maximum height of thresholds at doorways shall be 3/4 inch (19.1 mm). Such thresholds shall have beveled edges on each side.

404.4.14 Amusement rides. Where the structural or operational characteristics of an amusement ride are altered to the extent that the amusement ride's performance differs from that specified by the manufacturer or the original design, the amusement ride shall comply with requirements for new construction in Section ~~1110.4.8~~ 1111.4.8 of the VCC.

404.4.15 Dining areas. An accessible route to raised or sunken dining areas or to outdoor seating areas is not required provided that the same services and décor are provided in an accessible space usable by any occupant and not restricted to use by people with a disability.

~~K. Change~~ 5. Section 405 ~~to~~ Historic Buildings.

~~L. Change Section 405.1 to read:~~

405.1 General. These provisions shall apply to facilities designated as historic buildings or structures that undergo alterations unless technically infeasible. Where compliance with the requirements for accessible routes, entrances, or toilet rooms would threaten or destroy the historic significance of the facility, the alternative requirements of Sections 405.1.1 through 405.1.5 for that element shall be permitted.

~~M. Add Sections 405.1.1 through 405.1.5 to the IEBC to read:~~

405.1.1 Site arrival points. At least one accessible route from a site arrival point to an accessible entrance shall be provided.

405.1.2 Multilevel buildings and facilities. An accessible route from an accessible entrance to public spaces on the level of the accessible entrance shall be provided.

405.1.3 Entrances. Where an entrance cannot be made accessible in accordance with Section 404.4.1, an accessible entrance that is unlocked while the building is occupied shall be provided~~;~~ or~~,~~ a locked accessible entrance with a notification system or remote monitoring shall be provided.

Signs complying with Section ~~1111~~ 1112 of the VCC shall be provided at the primary entrances and the accessible entrance.

405.1.4 Toilet and bathing facilities. Where toilet rooms are provided, at least one accessible single-user ~~or~~, family, or assisted-use toilet or bathing room complying with ~~Sections 1109.2.1~~ Section 1110.2.1 of the VCC and Section 403.2.1 of the International Plumbing Code shall be provided.

405.1.5 Type B units. Type B dwelling or sleeping units required by Section ~~1107~~ 1108 of the VCC are not required to be provided in historic buildings or structures.

~~N. Delete Sections 405.2 through 405.2.5, including subsections, of the IEBC.~~

~~O. Delete Sections 406, 407, and 408 of the IEBC in their entirety.~~

13VAC5-63-433. Chapter 5 Repairs.

Replace Chapter 5 of the IEBC with the following:

~~A. Change Section 501.1 and 501.2 of the IEBC to read:~~

1. Section 501 General.

501.1 Scope. Repairs, including the patching ~~or~~, restoration, or replacement of damaged materials, elements, equipment, or fixtures shall comply with the requirements of this chapter. Repairs to historic buildings need only comply with Chapter 9. Portions of the existing building or structure not being repaired shall not be required to comply with the requirements of this code applicable to newly constructed buildings or structures. Work on nondamaged components that is necessary for the required repair of damaged components shall be considered part of the repair and shall not be subject to the provisions of Chapter 6. Routine maintenance required by Section 302, ordinary repairs exempt from permit in accordance with Section 108.2 of the VCC, and abatement of wear due to normal service conditions shall not be subject to the requirements for repairs in this section.

501.2 Conformance. The work shall not make the building less conforming than it was before the repair was undertaken. Repairs shall be done in a manner that maintains the following:

1. Level of fire protection that is existing.

2. Level of protection that is existing for the means of egress.

3. Level of accessibility that is existing.

~~B. Delete Section 501.1.1 of the IEBC.~~

~~C. Change~~ 2. Section 502 ~~to~~ Structural.

~~D. Change Sections 502.1 through 502.4 and add Section 502.4.1 to the IEBC to read:~~

502.1 General. Structural repairs shall be in compliance with this section and Section 501.2. Regardless of the scope of repair, new structural members and connections used for repair or rehabilitation shall comply with the detailing provisions of the VCC for new buildings of similar structure, purpose, and location.

502.1.1 Structural concrete. Assessment, design, and repairs to structural concrete shall be in accordance with ACI CODE 562. Assessment and design of repairs of seismic force-resisting concrete elements that result in changes of strength, stiffness, or ductility from predamage conditions shall be in accordance with Section 305.

502.2 Less than substantial structural damage. For damage less than substantial structural damage, repairs shall be allowed that restore the building to its predamage state.

502.3 Substantial structural damage to vertical elements of the lateral force-resisting system. A building that has sustained substantial structural damage to the vertical elements of its lateral force-resisting system shall be evaluated in accordance with Section 502.3.1 and either repaired in accordance with Section 502.3.2 or repaired and rehabilitated in accordance with Section 502.3.3, depending on the results of the evaluation.

Exceptions:

1. Buildings assigned to Seismic Design Category A, B, or C whose substantial structural damage was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earthquake effects.

2. One-family and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.

502.3.1 Evaluation. The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the building official. The evaluation shall establish whether the damaged building ~~if repaired to its predamage state,~~ would comply with the provisions of the VCC for load combinations that include wind or earthquake effects if repaired to its predamage state, except that the seismic forces shall be the reduced VCC-level seismic forces.

Wind loads for this evaluation shall be those prescribed in Section 1609 of the VCC. Earthquake loads for this evaluation, if required, shall be permitted to be 75% of those prescribed in Section 1613 of the VCC. Alternatively, compliance with ASCE 41, using the performance objective in Table 305.2.2 for the applicable risk category, shall be deemed to meet the earthquake evaluation requirement.

502.3.2 Extent of repair for compliant buildings. If the evaluation establishes that the building in its predamage condition complies with the provisions of Section 502.3.1, then repairs shall be permitted that restore the building to its predamage state.

502.3.3 Extent of repair for noncompliant buildings. If the evaluation does not establish that the building in its predamage condition complies with the provisions of Section 502.3.1, then the building shall be rehabilitated to comply with the provisions of this section. The wind loads for the repair shall be as required by the building code in effect at the time of original construction, unless the damage was caused by wind, in which case the wind loads shall be in accordance with the VCC. The earthquake loads for this rehabilitation design shall be those required by the building code in effect at the time of original construction, but not less than the reduced VCC-level seismic forces. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the VCC for new buildings of similar structure, purpose, and location. Alternatively, compliance with ASCE 41, using the performance objective in Table 305.2.2 for the applicable risk category~~,~~

shall be deemed to meet the earthquake rehabilitation requirement.

502.4 Substantial structural damage to gravity load-carrying components. Gravity load-carrying components that have sustained substantial structural damage shall be rehabilitated to comply with the applicable provisions for dead and live loads in the VCC. Snow loads shall be considered if the substantial structural damage was caused by or related to snow load effects. Existing gravity load carrying structural elements shall be permitted to be designed for live loads approved prior to the damage. If the approved live load is less than that required by Section 1607 of the VCC, the area designed for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Nondamaged gravity load-carrying components that receive dead, live, or snow loads from rehabilitated components shall also be rehabilitated if required to comply with the design loads of the rehabilitation design~~,~~ or shown to have the capacity to carry the design loads of the rehabilitation design. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the VCC for new buildings of similar structure purpose and location.

502.4.1 Lateral force-resisting elements. Regardless of the level of damage to gravity elements of the lateral force-resisting system, if substantial structural damage to gravity load-carrying components was caused primarily by wind or earthquake effects, then the building shall be evaluated in accordance with Section 502.3.1 and, if noncompliant, rehabilitated in accordance with Section 502.3.3.

Exceptions:

1. Buildings assigned to Seismic Design Category A, B, or C whose substantial structural damage was not caused by earthquake need not be evaluated or rehabilitated for load combinations that include earthquake effects.

2. One-family and two-family dwellings need not be evaluated or rehabilitated for load combinations that include earthquake effects.

~~E. Delete Sections 502.5 through 502.8 of the IEBC.~~

~~F. Change~~ 3. Section 503 ~~to~~ Flood Hazard Areas.

~~G. Change Section 503.1 of the IEBC to read:~~

503.1 Flood hazard areas. For buildings and structures~~,~~ in flood hazard areas established in Section 1612.3 of the VCC~~,~~ or Section R322 of the International Residential Code, as applicable, any repair that constitutes substantial improvement or repair of substantial damage of the existing building or structure shall comply with the flood design requirements for new construction and all aspects of the existing building or structure shall be brought into compliance with the requirements for new construction for flood design.

For buildings and structures in flood hazard areas established in Section 1612.3 of the VCC~~,~~ or Section R322 of the International Residential Code, as applicable, any repairs that do not constitute substantial improvement or repair of substantial damage of the existing building or structure are not required to comply with the flood design requirements for new construction.

~~H. Delete Sections 503.2 through 503.16.3, including subsections, of the IEBC.~~

~~I. Change~~ 4. Section 504 ~~to~~ Electrical.

~~J. Change Section 504.1, including subsections, and add section 504.1.5 of the IEBC to read:~~

504.1 Material. Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material.

504.1.1 Receptacles. Replacement of electrical receptacles shall comply with the applicable requirements of Section 406.4(D) of NFPA 70.

504.1.2 Plug fuses. Plug fuses of the Edison-base type shall be used for replacements only where there is no evidence of over fusing or tampering per applicable requirements of Section 240.51(B) of NFPA 70.

504.1.3 Nongrounding-type receptacles. For replacement of nongrounding-type receptacles with grounding-type receptacles and for branch circuits that do not have an equipment grounding conductor in the branch circuitry, the grounding conductor of a grounding-type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system or to any accessible point on the grounding electrode conductor in accordance with Section 250.130(C) of NFPA 70.

504.1.4 Group I-2 receptacles. Non-"hospital grade" receptacles in patient bed locations of Group I-2 shall be replaced with "hospital grade" receptacles, as required by NFPA 99 and Article 517 of NFPA 70.

504.1.5 Grounding of appliances. Frames of electric ranges, wall-mounted ovens, counter-mounted cooking units, clothes dryers, and outlet or junction boxes that are part of the existing branch circuit for these appliances shall be permitted to be grounded to the grounded circuit conductor in accordance with Section 250.140 of NFPA 70.

~~K. Delete Sections 504.2 through 504.5 of the IEBC.~~

~~L. Change~~ 5. Section 505 ~~to~~ Mechanical.

~~M. Change Sections 505.1 and 505.2 of the IEBC to read:~~

505.1 General. Existing mechanical systems undergoing repair shall not make the building less conforming than it was before the repair was undertaken.

505.2 Mechanical draft systems for manually fired appliances and fireplaces. A mechanical draft system shall be permitted to be used with manually fired appliances and fireplaces where such a system complies with all of the following requirements:

1. The mechanical draft device shall be listed and installed in accordance with the manufacturer's installation instructions.

2. A device shall be installed that produces visible and audible warning upon failure of the mechanical draft device or loss of electrical power at any time that the mechanical draft device is turned on. This device shall be equipped with a battery backup if it receives power from the building wiring.

3. A smoke detector shall be installed in the room with the appliance or fireplace. This device shall be equipped with a battery backup if it receives power from the building wiring.

~~N. Delete Sections 505.3 and 505.4 of the IEBC.~~

~~O. Change~~ 6. Section 506 ~~to~~ Plumbing.

~~P. Change Sections 506.1 and 506.2 of the IEBC to read:~~

506.1 Materials. Plumbing materials and supplies shall not be used for repairs that are prohibited in the International Plumbing Code.

506.2 Water closet replacement. The maximum water consumption flow rates and quantities for all replaced water closets shall be 1.6 gallons (6 L) per flushing cycle.

Exception: Blowout-design water closets 3.5 gallons (13 L) per flushing cycle.

~~Q. Delete Section 506.1.1 and Sections 506.3 through 506.4.4, including subsections, of the IEBC.~~

~~R. Change~~ 7. Section 507 ~~to~~ Energy Conservation.

~~S. Add Sections 507.1 and 507.2 to the IEBC to read:~~

507.1 General. Except as permitted by Sections 302.1 and 501.1, repairs shall comply with the VECC.

Exception: Where a building was constructed to comply with the requirements of the building code under which the building or structure or the affected portion thereof was built~~,~~ or as previously approved by the building official, repairs need not comply with the VECC, provided the repairs, as documented, do not result in reduced energy efficiency.

507.2 Application. For the purposes of this section, the following shall be considered repairs:

1. Glass-only replacements in an existing sash and frame.

2. Replacement of existing doors that separate conditioned space from the exterior shall not require the installation of a vestibule or revolving door, provided that an existing vestibule that separates a conditioned space from the exterior shall not be removed.

3. Repairs where only the bulb, the ballast, or both within the existing luminaires in a space are replaced, provided that the replacement does not increase the installed interior lighting power.

13VAC5-63-433.3. Chapter 6 Alterations.

Replace Chapter 6 of the IEBC with the following:

~~A. Change Sections 601.1 and 601.2 of the IEBC to read:~~

1. Section 601 General.

601.1 General. Except as modified in Chapter 9 or this chapter, alterations to any building or structure shall comply with the requirements of the VCC for new construction. Alterations shall be such that the existing building or structure is no less conforming to the provisions of the VCC than the existing building or structure was prior to the alteration. Portions of the building or structure not being altered shall not be required to comply with the requirements of the VCC.

Exceptions:

1. Any stairway replacing an existing stairway shall not be required to comply with the requirements of Section 1011 of the VCC where the existing space and construction does not allow a reduction in pitch or slope.

2. Handrails otherwise required to comply with Section 1011.11 of the VCC shall not be required to comply with the requirements of Section 1014.6 of the VCC regarding full extension of the handrails where such extensions would be hazardous due to plan configuration.

3. Where the current level of safety or sanitation is proposed to be reduced, the portion altered shall conform to the requirements of the VCC.

4. Alterations complying with the requirements of the building code under which the building or structure or the affected portions thereof was built~~,~~ or as previously approved by the building official, shall be considered in compliance with the provisions of this code. New structural members added as part of the alteration shall comply with the VCC. Alterations of existing buildings in flood hazard areas shall comply with Section 601.3.

601.2 Levels of alterations. Alterations to any building or structure shall be classified as the following:

~~B. Delete Section 601.1.1.~~

~~C. Add Sections 601.2.1 through 601.5, including subsections, to the IEBC to read:~~

601.2.1 Level 1. Level 1 alterations include the removal and replacement or the covering of existing materials, elements, equipment, or fixtures using new materials, elements, equipment, or fixtures that serve the same purpose~~,~~ or the removal without replacement of materials, elements, equipment, or fixtures. Level 1 alterations shall comply with the applicable provisions Section 602.

601.2.2 Level 2. Level 2 alterations shall comply with the applicable provisions of Sections 602 and 603 and shall include the following:

1. The addition or elimination of any door or window.

2. The addition of elimination of any wall, floor, or ceiling assembly.

3. The reconfiguration or extension of any system.

4. The installation of any ~~addition~~ additional equipment, materials, elements, or fixtures.

601.3 Flood hazard areas. In flood hazard areas, alterations that constitute substantial improvement shall require that the building comply with Section 1612 of the VCC or Section R322 of the International Residential Code, as applicable.

601.4 Energy conservation. Except as modified by this section, alterations to an existing building, building system, or structure shall conform to the applicable provisions of the Virginia Energy Conservation Code or Virginia Residential Code as they relate to new construction without requiring the unaltered portions of the existing building, building system, or structure to comply with the VECC or VRC.

601.4.1 Opaque walls. Where the existing stud wall cavity that is part of the thermal envelope is exposed during the alteration, such exposed cavities between framing members shall be filled with insulation having a minimum nominal value of not less than ~~R-30/inch~~ R-3 per inch or filled to the minimum prescriptive insulation requirement in Table ~~R402.1.2~~ R402.1.3 or Table C402.1.3 of the VECC.

Exception: Where less than 60 square feet (5.574 m^2) of the existing stud cavities that are part of the thermal envelope are exposed.

601.4.2 Floors. Where the existing framed floor cavity that is part of the thermal ~~envelop~~ envelope is exposed during the alteration, such exposed cavities between framing members shall be filled with insulation having a minimum nominal value of not less than ~~R-30/inch~~ R-3 per inch or filled to the minimum prescriptive insulation requirement in Table ~~R402.1.2~~ R402.1.3 or Table C402.1.3 of the VECC.

Exception: Where less than 60 square feet (5.574 m^2) of the existing framed floor cavities that are part of the thermal envelope are exposed.

601.4.3 Ceilings and vented attics. Where the existing rafter cavity that is part of the thermal envelope is exposed during the alteration, such exposed cavities between framing members shall be filled with insulation having a minimum nominal value of not less than ~~R-30/inch~~ R-3 per inch or filled to the minimum prescriptive insulation requirement in Table ~~R402.1.2~~ R402.1.3 or Table C402.1.3 of the VECC. Where the existing framed floor or truss bottom chord cavity of a vented attic is exposed during the alteration, the exposed cavities shall be filled with insulation having a minimum nominal value of not less than ~~R-30/inch~~ R-3 per inch or filled to the minimum prescriptive insulation requirement in Table ~~R402.1.2~~ R402.1.3 or Table C402.1.3 of the VECC. If the existing insulation laying on such vented attic floor is removed, such insulation shall be replaced with insulation complying with the minimum prescriptive insulation requirement in Table ~~R402.1.2~~ R402.1.3 or Table C402.1.3 of the VECC.

Exception: Where less than 60 square feet (5.574 m^2) of the existing rafter, framed vented attic floor, or truss bottom chord cavities that are part of the thermal envelope is exposed.

601.4.4 Fenestration. Where an existing fenestration unit is replaced, the replacement fenestration unit shall comply with the requirements for U-factor and SHGC as specified in Table R402.1.2 or Table C402.4 of the VECC, as applicable. Where more than one fenestration unit is to be replaced, an area-weighted average of the U-factor, SHGC, or both of all replacement fenestration units shall be permitted.

601.4.4.1 Converting fenestration unit to opaque wall. Where existing fenestration units are converted into an opaque exterior wall assembly, the new portion of wall shall comply with Section 601.4.1.

601.4.5 Roof replacement. Roof replacements shall comply with Section C402.2.1 and Section ~~C402.1.~~ C402.1.3, C402.1.4, C402.1.5, or C407 of the VECC where all of the following conditions are met. For purposes of this section, roof area shall mean an area of the existing roof of the same building that is bounded by exterior walls, different roof levels, roof edges or perimeters, roof dividers, building expansion joints, or parapets.

1. The roof replacement exceeds 75% or 30,000 square feet (2787.1 m^2) of the roof area, whichever is less.

2. The roof assembly is part of the building thermal envelope, as defined by the VECC.

3. The roof assembly contains insulation entirely above the roof deck.

601.4.6 Lighting. Lighting alterations shall comply with Section 601.4.6.1 or 601.4.6.2, as applicable.

601.4.6.1 Commercial Lighting. Altered commercial lighting shall comply with Section C405 of the VECC.

Exception: Alterations that replace less than 10% of the luminaires within a space, provided the replacement luminaires do not increase the existing interior lighting power as determined by Section C405.3.1 of the VECC.

601.4.6.2 Residential lighting. Altered residential lighting shall comply with Section R404 of the VECC.

Exception: Alterations that replace less than 50% of the total luminaires within a space, provided the replacement luminaires do not decrease the efficacy of the lighting equipment as required by Section R404.1 of the VECC.

601.4.7 Ducts. In R-5 occupancies, where ducts from an existing heating and cooling system are extended, such duct systems with less than 40 linear feet (12.19 m) in unconditioned spaces shall not be required to be tested in accordance with Section R403.3.3 of the VECC.

601.4.8 System sizing. Altered heating and cooling equipment shall comply with Section 601.4.8.1 or 601.4.8.2 through 601.4.8.2.1, as applicable.

601.4.8.1 Commercial system sizing. New commercial heating and cooling equipment that is part of an alteration shall be sized in accordance with Section C403.1.1 of the VECC based on the existing building features as modified by the alteration.

Exception: Where it has been demonstrated to the code official that compliance with this section would result in heating or cooling equipment that is incompatible with the rest of the heating or cooling system.

601.4.8.2 Residential heating and cooling systems. New residential heating and cooling and duct systems that are part of the alteration shall comply with Section R403 of the VECC and this section.

Exception: Where ducts from an existing heating and cooling system are extended to an addition.

601.4.8.2.1 Residential system sizing. New residential heating and cooling equipment that is part of an alteration shall be sized in accordance with Section R403.7 of the VECC based on the existing building features as modified by the alteration.

601.5 Accessibility. Accessibility shall be provided in accordance with applicable provisions of Section 404.

~~D. Change Sections 602.1 and 602.2 of the IEBC to read:~~

2. Section 602 Alteration - Level 1.

602.1 Scope. Level 1 alterations as described in Section 601.2.1 shall comply with the requirements of this section.

602.2 Conformance. Alterations shall be done in a manner that maintains the following:

1. Level of fire protection that is existing.

2. Level of protection that is existing for the means of egress.

~~E. Add Sections 602.3 through 602.3.5 to the IEBC to read:~~

602.3 Building elements and materials. Building elements and materials shall comply with the applicable provisions of Sections 302 and 602.3.1 through 602.3.3.

602.3.1 Interior finishes and trim. All newly installed interior finish and trim materials and wall, floor, and ceiling finishes shall comply with Chapter 8 of the VCC.

602.3.2 Materials and methods. All new building elements and materials shall comply with the materials and methods requirements in the VCC, International Energy Conservation Code, International Mechanical Code, and International Plumbing Code, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

602.3.2.1 Reroofing. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with Chapter 15 of the VCC, except as modified by Section 302.1 and this section.

Exceptions:

1. Roof replacement or roof recover of existing low-slope roof coverings shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2.0% slope) in Section 1507 of the VCC for roofs that provide positive roof drainage.

2. Recovering or replacing an existing roof covering shall not be required to meet the requirement of secondary (emergency overflow) drains or scuppers in Section ~~1503.4~~ 1502 of the VCC for roofs that provide positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with the VCC shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section ~~1503.4~~ 1502 of the VCC.

3. Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section 1507 of the VCC.

602.3.2.1.1 Roof recover permitted. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:

1. Complete and separate roofing systems, such as standing-seam metal roof systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.

2. Where the application of a new roof covering over wood shingle or shake roofs creates a combustible concealed space, the entire existing surface is covered with gypsum board, mineral fiber, glass fiber, or other approved materials securely fastened in place.

3. The application of a new protective coating over an existing spray polyurethane foam roofing system shall be permitted without tearoff of existing roof coverings.

4. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.

602.3.2.1.2 Roof recover not permitted. A roof recover shall not be permitted where any of the following conditions occur:

1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.

2. Where the existing roof covering is slate, clay, cement, or asbestos-cement tile.

3. Where the existing roof has two or more applications of any type of roof covering.

602.3.2.1.3 Reinstallation of materials. Existing slate, clay, or cement tile shall be permitted for reinstallation, except that damaged, cracked, or broken slate or tile shall not be reinstalled. Existing vent flashing, metal edgings, drain outlets, collars, and metal counter-flashings shall not be reinstalled where rusted, damaged, or deteriorated. Aggregate surfacing materials shall not be reinstalled. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation.

602.3.2.2 Structural and construction loads. Structural roof components shall be capable of supporting the roof covering system and the material and equipment loads that will be encountered during installation of the systems.

Exception: Structural elements where the additional dead load from the roofing or equipment does not increase the force in the element by more than 5.0%; or where the addition of a second layer of roof covering weighing three pounds per square foot ~~(0.1437kN/m)~~ (0.1437kN/m^2) or less over an existing, single layer of roof covering.

602.3.3 International Fuel Gas Code. The following sections of the International Fuel Gas Code shall constitute the fuel gas materials and methods requirements for Level 1 alterations.

1. All of Chapter 3, entitled "General Regulations," except Sections 303.7 and 306.

2. All of Chapter 4, entitled "Gas Piping Installations," except Sections 401.8 and ~~402.3.2.1~~ 402.3. Sections 401.8 and 402.3 shall apply when the work being performed increases the load on the system such that the existing pipe does not meet the size required by code. Existing systems that are modified shall not require resizing as long as the load on the system is not increased and the system length is not increased even if the altered system does not meet code minimums.

3. All of Chapter 5, entitled "Chimneys and Vents."

4. All of Chapter 6, entitled "Specific Appliances."

~~F. Change Section 603.1 and 603.2, and add Sections 603.3 through 603.7.6, including subsections, to the IEBC to read:~~

3. Section 603 Alteration - Level 2.

603.1 Scope. Level 2 alterations as described in Section 601.2.2 shall comply with the requirements of this section.

Exception: Buildings in which the alteration is exclusively the result of compliance with the accessibility requirements of Section 404.3 shall be permitted to comply with Section 602.

603.2 Level 1 alteration compliance. In addition to the requirements of this section, all alterations shall comply with the applicable requirements of Section 602.

603.3 Compliance. All new construction elements, components, systems, and spaces shall comply with the requirements of the VCC.

Exceptions:

1. Windows may be added without requiring compliance with the light and ventilation requirements of the VCC.

2. Where an approved automatic sprinkler system is installed throughout the story, the required fire-resistance rating for any corridor located on the story shall be permitted to be reduced in accordance with the VCC. In order to be considered for a corridor rating reduction, such system shall provide coverage for the stairway landings serving the floor and the intermediate landings immediately below.

3. In other than Groups A and H occupancies, the maximum length of a newly constructed or extended dead-end corridor shall not exceed 50 feet (15240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the VCC.

4. The minimum ceiling height of the newly created habitable and occupiable spaces and corridors shall be ~~7~~ seven feet (2134 mm).

5. Where provided in below-grade transportation stations, new escalators shall be permitted to have a clear width of less than 32 inches (815 mm).

603.4 Fire-resistance ratings. ~~Buildings~~ In buildings where an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the VCC has been added~~,~~ and the building is now sprinklered throughout, the required fire-resistance ratings of building elements and materials shall be permitted to meet the requirements of the current building code.

603.5 Mechanical. In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured, or extended shall provide not less than ~~5~~ five cubic feet per minute (cfm) (0.0024 m^3/s) per person of outdoor air and not less than 15 cfm (0.0071 m^3/s) of ventilation air per person or not less than the amount of ventilation air determined by the Indoor Air Quality Procedure of ASHRAE ~~62~~ 62.1.

603.5.1 Local exhaust. All newly introduced devices, equipment, or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products,

gaseous contaminants, pathogenic and allergenic organisms, and microbial contaminants in such quantities as to affect adversely or impair health or cause discomfort to occupants shall be provided with local exhaust.

~~603.6 Plumbing. Where the occupant load of the story is increased by more than 20%, plumbing fixtures for the story shall be provided in quantities specified in the International Plumbing Code based on the increased occupant load.~~

603.7 Structural. Structural elements and systems within buildings undergoing Level 2 alterations shall comply with Sections 603.7.1 through 603.7.6.

603.7.1 New structural elements. New structural elements in alterations, including connections and anchorage, shall comply with the VCC.

603.7.2 Minimum design loads. The minimum design loads on existing elements of a structure that do not support additional loads as a result of an alteration shall be the loads applicable at the time the building was constructed.

603.7.3 Existing structural elements carrying gravity loads. Any existing gravity load-carrying structural element for which an alteration causes an increase in design gravity load of more than ~~5%~~ 5.0% shall be strengthened, supplemented, replaced, or otherwise altered as needed to carry the increased gravity load required by the VCC for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased as part of the alteration shall be shown to have the capacity to resist the applicable design gravity loads required by the VCC for new structures.

Exception: Buildings of Group R occupancy with not more than five dwelling or sleeping units used solely for residential purposes where the existing building and its alteration comply with the conventional light-frame construction methods of the VCC or the provisions of the International Residential Code.

603.7.3.1 Design live load. Where the alteration does not result in increased design live load, existing gravity load-carrying structural elements shall be permitted to be evaluated and designed for live loads approved prior to the alteration. If the approved live load is less than that required by Section 1607 of the VCC, the area designed for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Where the alteration does result in increased design live load, the live load required by Section 1607 of the VCC shall be used.

603.7.4 Existing structural elements resisting lateral loads. Except as permitted by Section 603.7.5, where the alteration increases design lateral loads in accordance with Section 1609 or 1613 of the VCC, ~~or~~ where the alteration results in a prohibited structural irregularity as defined in ASCE 7, or where the alteration decreases the capacity of any existing lateral load-carrying structural element, the structure of the altered building or structure shall be shown to meet the requirements of Sections 1609 and 1613 of the VCC. For purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 305.2.2 for the applicable risk category, shall be deemed to meet the requirements of Section 1613 of the VCC.

~~Exception~~ Exceptions:

1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the alteration considered is not more than 10% greater than its demand-capacity ratio with the alteration ignored shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with VCC Sections 1609 and 1613. Reduced VCC level seismic forces in accordance with Section 305.2.2 shall be permitted. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces, and capacities shall account for the cumulative effects of additions and alterations since original construction.

2. Buildings of Group R occupancy with no more than five dwelling or sleeping units used solely for residential purposes that are altered based on the conventional light-frame construction methods of the VCC or in compliance with the provisions of the IRC.

3. Where such alterations involve only the lowest story of a building and the change of occupancy provisions of Chapter 7 do not apply, only the lateral force-resisting components in and below that story need comply with this section.

603.7.5 Voluntary lateral force-resisting system alterations. Alterations of existing structural elements and additions of new structural elements that are initiated for the purpose of increasing the lateral force-resisting strength or stiffness of an existing structure and that are not required by other sections of this code shall not be required to be designed for forces conforming to the VCC, provided that an engineering analysis is submitted to show that:

1. The capacity of existing structural elements required to resist forces is not reduced;

2. The lateral loading to existing structural elements is not increased either beyond ~~its~~ their capacity or more than 10%;

3. New structural elements are detailed and connected to the existing structural elements as required by the VCC;

4. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required by the VCC; and

5. Voluntary alterations to lateral force-resisting systems conducted in accordance with Appendix A and the referenced standards of this code shall be permitted.

603.7.6 Voluntary seismic improvements. Alterations to existing structural elements or additions of new structural elements that are not otherwise required by this chapter and are initiated for the purpose of improving the performance of the seismic force resisting system of an existing structure or the performance of seismic bracing or anchorage of existing nonstructural elements shall be permitted, provided that an engineering analysis is submitted demonstrating the following:

1. The altered structure and the altered nonstructural elements are no less conforming to the provisions of the VCC with respect to earthquake design than they were prior to the alteration.

2. New structural elements are detailed as required for new construction.

3. New or relocated nonstructural elements are detailed and connected to existing or new structural elements as required for new construction.

4. The alterations do not create a structural irregularity as defined in ASCE 7 or make an existing structural irregularity more severe.

~~G. Delete Sections 604, 605, 606, 607, and 608 of the IEBC in their entirety.~~

13VAC5-63-433.5. Chapter 7 Change of occupancy.

Replace Chapter 7 of the IEBC with the following:

~~A. Change Sections 701.1 through 701.2 of the IEBC to read:~~

1. Section 701 General.

701.1 Scope. The provisions of this chapter shall apply where a change of occupancy occurs, except as modified by Section 906 for historic buildings. Compliance with the current VCC for the change of occupancy shall only be required as prescribed in this chapter. Compliance shall be only as necessary to meet the specific provisions of the applicable International Codes and is not intended to require the entire building be brought into compliance.

Exception: ~~Compliance with the provisions of~~ Chapter 14 shall be permitted ~~in lieu of complying with~~ as a compliance alternative to this chapter for a change of occupancy to buildings that will not continue to be or are not proposed to be Institutional Group I occupancies, High-Hazard Group H occupancies, or Residential Group R-5.

701.2 Work undertaken in connection with a change of occupancy. Any repairs, alterations, or additions undertaken in connection with a change of occupancy shall conform to the applicable requirements for the work as classified in this code and as modified by this chapter.

~~B. Delete Sections 701.3 and 701.4 of the IEBC.~~

~~C. Change~~ 2. Section 702 ~~to~~ Special Use and Occupancy.

~~D. Change Sections 702.1 and 702.2 of the IEBC to read:~~

702.1 Compliance with the building code. Where a building undergoes a change of occupancy to one of the special use or occupancy categories described in Chapter 4 of the VCC, the building shall comply with all of the requirements of Chapter 4 of the VCC applicable to the special use or occupancy.

702.2 Incidental uses. Where a portion of a building undergoes a change of occupancy to one of the incidental uses listed in Table 509 of the VCC, the incidental use shall comply with the applicable requirements of Section 509 of the VCC.

~~E. Delete Sections 702.3 through 702.6.1, including subsections, of the IEBC.~~

~~F. Change~~ 3. Section 703 ~~to~~ Building Elements and Materials.

~~G. Change Section 703.1 of the IEBC and add Section 703.2, including subsections, to the IEBC to read:~~

703.1 Interior finish. In areas of the building undergoing a change of occupancy classification, the interior finish of walls and ceilings shall comply with the requirements of the VCC for the new occupancy classification.

703.2 Enclosure of vertical openings. When a change of occupancy classification is made to a higher hazard category as shown in Table 705.2, protection of existing vertical openings shall be in accordance with Sections 703.2.1 through 703.2.3.

703.2.1 Stairways. Interior stairways shall be protected as required by Section 705.1.

703.2.2 Other vertical openings. Interior vertical openings, other than stairways, within the area of the change of occupancy shall be protected as required by the VCC.

Exceptions:

1. Existing one-hour interior shaft enclosures shall be accepted where a higher rating is required.

2. Vertical openings, other than stairways, in buildings of other than Group I occupancy and connecting less than six stories shall not be required to be enclosed and are permitted if the entire building is provided with an approved automatic sprinkler system.

703.2.3 Shaft openings. All openings into existing vertical shaft enclosures shall be protected by fire assemblies having a fire protection rating of not less than one hour and shall be maintained self-closing or shall be automatic-closing by actuation of a smoke detector. All other

openings shall be fire protected in an approved manner. Existing fusible link-type automatic door-closing devices shall be permitted in all shafts except stairways if the fusible link rating does not exceed 135°F (57°C).

~~H. Change~~ 4. Section 704 ~~to~~ Fire Protection.

~~I. Change Section 704.1 of the IEBC and add Sections 704.2, 704.3 and 704.4 to the IEBC to read:~~

704.1 Fire protection systems. Fire protection systems shall be provided in accordance with Sections 704.2 through 704.4.

704.2 Fire sprinkler system. Where a building undergoes a change of occupancy that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Section 903 of the VCC, such automatic fire sprinkler system shall be provided throughout the area where the change of occupancy occurs.

704.3 Fire alarm and detection system. Where a building undergoes a change of occupancy that requires a fire alarm and detection system to be provided based on the new occupancy in accordance with Section 907 of the VCC, such fire alarm and detection system shall be provided throughout the area where the change of occupancy occurs. Existing alarm notification appliances shall be automatically activated throughout the building. Where the building is not equipped with a fire alarm system, alarm notification appliances shall be provided throughout the area where the change of occupancy occurs in accordance with Section 907 of the VCC as required for new construction.

704.4 Standpipe system. Where a building undergoes a change of occupancy that requires a standpipe system to be provided based on the new occupancy in accordance with Section 905 of the VCC, such standpipe system shall be provided to serve the area where the change of occupancy occurs.

~~J. Change~~ 5. Section 705 ~~to~~ Means of Egress.

~~K. Change Sections 705.1 through 705.4, deleting subsections, and delete Sections 705.5 and 705.6 of the IEBC to read:~~

705.1 General. Means of egress in buildings undergoing a change of occupancy shall comply with Sections 705.2 through 705.4.

705.2 Means of egress, hazards. Hazard categories in regard to life safety and means of egress shall be in accordance with Table 705.2.

TABLE 705.2
MEANS OF EGRESS HAZARD CATEGORIES

RELATIVE HAZARD	OCCUPANCY CLASSIFICATIONS
1 (Highest Hazard)	H
2	I-2, I-3, I-4
3	A, E, I-1, M, R-1, R-2, R-4
4	B, F-1, R-3, S-1, R-5
5 (Lowest Hazard)	F-2, S-2, U

705.3 Means of egress for change to higher hazard category. When a change of occupancy classification is made to a higher hazard category (lower number) as shown in Table 705.2, the means of egress serving the area of the change of occupancy shall comply with the requirements of Chapter 10 of the VCC, except as modified in Sections 705.3.1 through 705.3.7.

705.3.1 Corridor fire-resistance ratings. The following exceptions apply to the fire-resistance rated corridor provisions in the VCC:

1. Existing corridor walls constructed on both sides of wood lath and plaster in good condition or 1/2-inch-thick (12.7 mm) gypsum wallboard are equivalent to a one-hour fire-resistance rating. Such walls shall either terminate at the underside of a ceiling of equivalent construction or extend to the underside of the floor or roof next above.

2. Dwelling unit or sleeping unit corridor doors and transom openings are permitted to comply with any of the following:

2.1 Be at least ~~13/8-inch~~ 1-3/8-inch (35 mm) ~~solid-core~~ solid-core wood or approved equivalent ~~and~~, shall not have any glass panels other than approved wired glass or other approved glazing material in metal frames, and shall be equipped with approved door closers.

2.2 Meet the requirements of "Guidelines on Fire Ratings of Archaic Materials and Assemblies" (VEBC Resource A) for a rating of 15 minutes or more ~~shall be accepted as meeting the provisions of this requirement~~.

2.3 In buildings protected throughout with an approved automatic sprinkler system, resist smoke, be reasonably tight fitting, and not contain louvers.

2.4 In group homes with a maximum of 15 occupants and that are protected with an approved automatic smoke detection system, closing devices may be omitted.

2.5 Transoms in corridor walls shall be either glazed with 1/4-inch (6.4 mm) wired glass set in metal frames or other glazing assemblies having a ~~fire protection~~ fire-protection rating as required for the door and permanently secured in the closed position or sealed with materials consistent with the corridor construction.

3. Openings in a corridor and any window in a corridor not opening to the outside air shall be sealed with materials consistent with the corridor construction.

705.3.2 Dead-end corridors. Dead-end corridors shall not exceed 35 feet (10670 mm).

Exceptions:

1. Where dead-end corridors of greater length are permitted by the VCC.

2. In other than Groups A and H occupancies, the maximum length of an existing dead-end corridor shall be 50 feet (15240 mm) in buildings equipped throughout with an automatic fire alarm system installed in accordance with the VCC.

3. In other than Groups A and H occupancies, the maximum length of an existing dead-end corridor shall be 70 feet (21356 mm) in buildings equipped throughout with an automatic sprinkler system installed in accordance with the VCC.

4. In other than Groups A and H occupancies, the maximum length of an existing, newly constructed, or extended dead-end corridor shall not exceed 50 feet (15240 mm) on floors equipped with an automatic sprinkler system installed in accordance with the VCC.

705.3.3 Emergency escape and rescue openings. An existing operable window with clear opening area ~~no~~ not less than ~~4~~ four square feet (0.38 m^2) and minimum opening height and width of 22 inches (559 mm) and 20 inches (508 mm), respectively, shall be accepted as an emergency escape and rescue opening.

705.3.4 Fire escapes. Fire escapes shall be in compliance with Section 303.

705.3.5 Interior stairway fire-resistance ratings. Existing interior stairways connecting two or more floors shall be enclosed with approved assemblies having a fire-resistance rating of not less than one hour with approved opening protectives from the highest floor where the change of occupancy classification occurs to~~,~~ and including~~,~~ the level of exit discharge and all floors below.

Exceptions:

1. Where interior stairway enclosure is not required by the VCC.

2. Unenclosed existing stairways need not be enclosed in a continuous vertical shaft if each story is separated from other stories by one-hour fire-resistance-rated construction or approved wired glass set in steel frames and all exit corridors are sprinklered. The openings between the corridor and the occupant space shall have at least one sprinkler head above the openings on the tenant side. The sprinkler system shall be permitted to be supplied from the domestic water supply systems, provided the system is of adequate pressure, capacity, and sizing for the combined domestic and sprinkler requirements.

3. In Group A occupancies, a minimum 30-minute enclosure shall be permitted to protect all interior stairways not exceeding three stories.

4. In Group B occupancies, a minimum 30-minute enclosure shall not be permitted to protect all interior stairways not exceeding three stories. This enclosure shall not be required in the following locations:

4.1 Buildings not exceeding 3,000 square feet (279 m^2) per floor.

4.2 Buildings protected throughout by an approved automatic fire sprinkler system.

5. In Group E occupancies, the enclosure shall not be required for interior stairways not exceeding three stories when the building is protected throughout by an approved automatic fire sprinkler system.

6. In Group F occupancies, the enclosure shall not be required in the following locations:

6.1 Interior stairways not exceeding three stories.

6.2 Special purpose occupancies where necessary for manufacturing operations and direct access is provided to at least one protected stairway.

6.3 Buildings protected throughout by an approved automatic sprinkler system.

7. In Group H occupancies, the enclosure shall not be required for interior stairways not exceeding three stories where stairways are necessary for manufacturing operations and every floor level has direct access to at least two remote enclosed stairways or other approved exits.

8. In Group M occupancies, a minimum 30-minute enclosure shall be permitted to protect all interior stairways not exceeding three stories. This enclosure shall not be required in the following locations:

8.1 Stairways connecting only two floor levels.

8.2 Occupancies protected throughout by an approved automatic sprinkler system.

9. In Group R-1 occupancies, the enclosure shall not be required for interior stairways not exceeding three stories in the following locations:

9.1 Buildings protected throughout by an approved automatic sprinkler system.

9.2 Buildings with fewer than 25 dwelling units or sleeping units where every sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit by means of an approved exterior door or window having a sill height of not greater than 44 inches (1118 mm) and where:

9.2.1 Any exit access corridor exceeding ~~8~~ eight feet (2438 mm) in length that serves two means of egress, one of which is an unprotected vertical opening, ~~shall have~~ has at least one of the means of egress separated from the vertical opening by a one-hour fire barrier; and

9.2.2 The building is protected throughout by an automatic fire alarm system, installed and supervised in accordance with the VCC.

10. In Group R-2 occupancies, a minimum 30-minute enclosure shall be permitted to protect interior stairways

not exceeding three stories. This enclosure shall not be required in the following locations:

10.1 Interior stairways not exceeding two stories with not more than four dwelling units per floor.

10.2 Buildings protected throughout by an approved automatic sprinkler system.

10.3 Buildings with not more than four dwelling units per floor where every sleeping room above the second floor is provided with direct access to a fire escape or other approved second exit by means of an approved exterior door or window having a sill height of not greater than 44 inches (1118 mm), and the building is protected throughout by an automatic fire alarm system complying with the VCC.

11. Stairway enclosure is not required in one-family and two-family dwellings.

12. Group S occupancies where connecting not more than two floor levels or where connecting not more than three floor levels and the structure is equipped throughout with an approved automatic sprinkler system.

13. Group S occupancies where stairway protection is not required for open parking garages and ramps.

705.3.6 Stairway geometry. Existing stairways are not required to be altered to meet tread depth and riser height requirements of the VCC.

705.3.7 Stairway handrails. Existing stairways are required to have a VCC compliant handrail on one side up to a required egress width of 66 inches (1676 mm) and both sides when the required egress width exceeds 66 inches (1676 mm).

705.4 Means of egress for change of occupancy to equal or lower hazard category or without a change in classification. When a change of occupancy classification is made to an equal or lesser hazard category (higher number) as shown in Table 705.2 or a change of occupancy without a change of classification is made, the means of egress shall be deemed acceptable provided the means of egress serving the area of the change of occupancy meets the egress capacity and occupant load based means of egress provisions in Chapter 10 of the VCC for the new occupancy.

~~L. Change~~ 6. Section 706 ~~to~~ Heights and Areas.

~~M. Change Sections 706.1 through 706.3, including subsections, and add Sections 706.4 and 706.5 of the IEBC to read:~~

706.1 General. Heights and areas of buildings and structures undergoing a change of occupancy classification shall comply with ~~this Section~~ Sections 706.2 through 706.5.

706.2 Heights and areas, hazards. Hazard categories in regard to height and area shall be in accordance with Table 706.2.

TABLE 706.2
HEIGHTS AND AREAS HAZARD CATEGORIES

RELATIVE HAZARD	OCCUPANCY CLASSIFICATIONS
1 (Highest Hazard)	H
2	A-1, A-2, A-3, A-4, I, R-1, R-2, R-4
3	E, F-1, S-1, M
4 (Lowest Hazard)	B, F-2, S-2, A-5, R-3, R-5, U

706.3 Height and area for change to higher hazard category. When a change of occupancy classification is made to a higher hazard category as shown in Table 706.2, heights and areas of buildings and structures shall comply with the requirements of Chapter 5 of the VCC for the new occupancy classification.

Exception: For high-rise buildings constructed in compliance with a previously issued permit, the type of construction reduction specified in Section 403.2.1 of the VCC is permitted. This shall include the reduction for columns. The high-rise building is required to be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC.

706.3.1 Fire wall alternative. In other than Groups H, F-1, and S-1, fire barriers and horizontal assemblies constructed in accordance with Sections 707 and 711, respectively, of the VCC shall be permitted to be used in lieu of fire walls to subdivide the building into separate buildings for the purpose of complying with the area limitations required for the new occupancy where all of the following conditions are met:

1. The buildings are protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the International Building Code.

2. The maximum allowable area between fire barriers, horizontal assemblies, or any combination thereof shall not exceed the maximum allowable area determined in accordance with Chapter 5 of the VCC without an increase allowed for an automatic sprinkler system in accordance with Section 506 of the VCC.

3. The fire-resistance rating of the fire barriers and horizontal assemblies shall be not less than that specified for fire walls in Table 706.4 of the VCC.

Exception: Where horizontal assemblies are used to limit the maximum allowable area, the required fire-resistance rating of the horizontal assemblies shall be permitted to be reduced by one hour provided the height and number of stories increases allowed for an automatic sprinkler system by Section 504 of the VCC are not used for the buildings.

706.4 Height and area for change to equal or lesser hazard category. When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table 706.2, the height and area of the existing building shall be deemed acceptable.

706.5 Fire barriers. When a change of occupancy classification is made to a higher hazard category as shown in Table 706.2, fire barriers in separated mixed use buildings shall comply with the fire-resistance requirements of the VCC.

Exception: Where the fire barriers are required to have a one-hour-fire-resistance rating, existing wood lath and plaster in good condition or existing 1/2-inch-thick (12.7 mm) gypsum wallboard shall be permitted.

~~N. Change~~ 7. Section 707 ~~to~~ Exterior Wall Fire-Resistance Ratings.

~~O. Change Section 707.1 and add Sections 707.2 through 707.4 to the IEBC to read:~~

707.1 Exterior wall fire-resistance ratings, hazards. Hazard categories in regard to fire-resistance ratings of exterior walls shall be in accordance with Table 707.1.

TABLE 707.1
EXPOSURE OF EXTERIOR WALLS HAZARD CATEGORIES

RELATIVE HAZARD	OCCUPANCY CLASSIFICATIONS
1 (Highest Hazard)	H
2	F-1, M, S-1
3	A, B, E, I, R
4 (Lowest Hazard)	F-2, S-2, U

707.2 Exterior wall rating for change of occupancy classification to a higher hazard category. When a change of occupancy classification is made to a higher hazard category as shown in Table 707.1, exterior walls shall have fire resistance and exterior opening protectives as required by the VCC.

~~Exception: A two hour fire resistance rating shall be allowed where the building does not exceed three stories in height and is classified as one of the following groups: A-2 and A-3 with an occupant load of less than 300, B, F, M, or S.~~

707.3 Exterior wall rating for change of occupancy classification to an equal or lesser hazard category. When a change of occupancy classification is made to an equal or lesser hazard category as shown in Table 707.1, existing exterior walls, including openings, shall be accepted.

707.4 Opening protectives. Openings in exterior walls shall be protected as required by the VCC. Where openings in the exterior walls are required to be protected because of their distance from the lot line, the sum of the area of such openings shall not exceed 50% of the total area of the wall in each story.

Exceptions:

1. Where the VCC permits openings in excess of 50%.

2. Protected openings shall not be required in buildings of Group R occupancy that do not exceed three stories in height and that are located not less than ~~3~~ three feet (914 mm) from the lot line.

3. Where exterior opening protectives are required, an automatic sprinkler system throughout may be substituted for opening protection.

4. Exterior opening protectives are not required when the change of occupancy group is to an equal or lower hazard classification in accordance with Table 707.1.

~~P. Add~~ 8. Section 708 Electrical and Lighting.

~~Q. Add Sections 708.1 through 708.4 to the IEBC to read:~~

708.1 Special occupancies. Where a building undergoes a change of occupancy to one of the following special occupancies as described in NFPA 70, the electrical wiring and equipment of the building that contains the proposed occupancy shall comply with the applicable requirements of NFPA 70:

1. Hazardous locations.

2. Commercial garages, repair, and storage.

3. Aircraft hangars.

4. Gasoline dispensing and service stations.

5. Bulk storage plants.

6. Spray application, dipping, and coating processes.

7. Health care facilities.

8. Places of assembly.

9. Theaters, audience areas of motion picture and television studios, and similar locations.

10. Motion picture and television studios and similar locations.

11. Motion picture projectors.

12. Agricultural buildings.

708.2 Service upgrade. When a new occupancy is required to have a higher electrical load demand per NFPA 70 and the service cannot accommodate the increased demand, the service shall be upgraded to meet the requirements of NFPA 70 for the new occupancy.

708.3 Number of electrical outlets. Where a building undergoes a change of occupancy, the number of electrical outlets shall comply with NFPA 70 for the new occupancy.

708.4 Lighting. Lighting shall comply with the requirements of the VCC for the new occupancy.

~~R. Add~~ 9. Section 709 Mechanical and Ventilation.

~~S. Add Section 709.1 to the IEBC to read:~~

709.1 Mechanical and ventilation requirements. Where a building undergoes a change of occupancy such that the new occupancy is subject to different kitchen exhaust requirements or to increased ventilation requirements in accordance with the International Mechanical Code, the new occupancy shall comply with the respective International Mechanical Code provisions.

~~T. Add~~ 10. Section 710 Plumbing.

~~U. Add Sections 710.1 through 710.3 to the IEBC to read~~:

710.1 Increased demand. Where a building or portion thereof undergoes a change of occupancy, such that the new occupancy is subject to increased or different plumbing fixture requirements or to increased water supply requirements in accordance with the International Plumbing Code, the new occupancy shall comply with the respective International Plumbing Code provisions.

Exception: In other than Group R or I occupancies or child care facilities classified as Group E, where the occupant load is increased by 20% or less in the area where the change of occupancy occurs, additional plumbing fixtures required based on the increased occupant load in quantities specified in the International Plumbing Code are not required.

710.2 Interceptor required. If the new occupancy will produce grease or oil-laden wastes, interceptors shall be provided as required in the International Plumbing Code.

710.3 Chemical wastes. If the new occupancy will produce chemical wastes, the following shall apply:

1. If the existing piping is not compatible with the chemical waste, the waste shall be neutralized prior to entering the drainage system, or the piping shall be changed to a compatible material.

2. No chemical waste shall discharge to a public sewer system without the approval of the sewage authority.

~~V. Add~~ 11. Section 711 Structural.

~~W. Add Sections 711.1 through 711.3, including subsections, to the IEBC to read:~~

711.1 Gravity loads. Buildings subject to a change of occupancy where such change in the nature of occupancy results in higher uniform or concentrated loads based on Table 1607.1 of the VCC shall comply with the gravity load provisions of the VCC.

Exception: Structural elements whose stress is not increased by more than ~~5%~~ 5.0%.

711.2 Snow and wind loads. Buildings and structures subject to a change of occupancy where such change in the nature of occupancy results in higher wind or snow risk categories based on Table 1604.5 of the VCC shall be analyzed and shall comply with the applicable wind or snow load provisions of the VCC.

Exception: Where the new occupancy with a higher risk category is less than or equal to 10% of the total building floor area. The cumulative effect of the area of occupancy changes shall be considered for the purposes of this exception.

711.3 Seismic loads. Existing buildings with a change of occupancy shall comply with the seismic provisions of Sections 711.3.1 and 711.3.2.

711.3.1 Compliance with VCC-level seismic forces. Where a building is subject to a change of occupancy that results in the building being assigned to a higher risk category based on Table 1604.5 of the VCC, the building shall comply with the requirements for VCC-level seismic forces as specified in Section 305.2.1 for the new risk category.

Exceptions:

1. Specific detailing provisions required for a new structure are not required to be met where it can be shown that an equivalent level of performance and seismic safety is obtained for the applicable risk category based on the provision for reduced VCC-level seismic forces as specified in Section 305.2.2.

2. Where the area of the new occupancy with a higher hazard category is less than or equal to 10% of the total building floor area and the new occupancy is not classified as Risk Category IV. For the purposes of this exception, buildings occupied by two or more occupancies not included in the same risk category, shall be subject to the provisions of Section 1604.5.1 of the VCC. The cumulative effect of the area of occupancy changes shall be considered for the purposes of this exception.

3. Unreinforced masonry bearing wall buildings in Risk Category III when assigned to Seismic Design Category A or B shall be allowed to be strengthened to meet the requirements of Appendix ~~Chapter A1 of this code Guidelines for the Seismic Retrofit of Existing Buildings (GSREB)~~ A.

4. Specific seismic detailing requirements of Section 1613 of the VCC for a new structure shall not be required to be met where the seismic performance is shown to be equivalent to that of a new structure. A demonstration of equivalence shall consider the regularity, overstrength, redundancy, and ductility of the structure.

5. When a change of occupancy results in a structure being reclassified from Risk Category I or II to Risk Category III and the structure is located where the seismic coefficient, SDS, is less than 0.33, compliance with the seismic requirements of Section 1613 of the VCC is not required.

711.3.2 Access to Risk Category IV. Where a change of occupancy is such that compliance with Section 711.3.1 is

required and the building is assigned to Risk Category IV, the operational access to the building shall not be through an adjacent structure~~,~~ unless that structure conforms to the requirements for Risk Category IV structures. Where operational access is less than 10 feet (3048 mm) from either an interior lot line or from another structure, access protection from potential falling debris shall be provided by the owner of the Risk Category IV structure.

~~X. Add~~ 12. Section 712 Accessibility.

~~Y. Add Section 712.1 to the IEBC to read:~~

712.1 General. Existing buildings that undergo a change of occupancy classification shall comply with Section 402.

13VAC5-63-434. Chapter 8 Additions.

Replace Chapter 8 of the IEBC with the following:

~~A. Change Sections 801.1 through 801.3 of the IEBC to read:~~

1. Section 801 General.

801.1 Scope. Additions to any building or structure shall comply with the requirements of the VCC for new construction without requiring the existing building or structure to comply with any requirements of those codes or of these provisions, except as required by this chapter. Where an addition impacts the existing building or structure, that portion shall comply with this code. Where a fire wall that complies with Section 706 of the VCC is provided between the addition and the existing building, the addition shall be considered a separate building.

Note: Where one or more newly constructed fire walls that comply with Section 706 of the VCC are provided between an existing building, ~~or~~ structure, or portions thereof~~,~~ and a new building, this chapter is not applicable per Section 102.2.3.

801.2 Creation or extension of nonconformity. An addition shall not create or extend any nonconformity in the existing building to which the addition is being made with regard to accessibility, structural strength, fire safety, means of egress, or the capacity of mechanical, plumbing, or electrical systems. Alterations to the existing building or structure shall be made so that the existing building or structure, together with the addition, are no less conforming to the provisions of the VCC than the existing building or structure was prior to the addition.

801.3 Other work. Any repair or alteration work within an existing building to which an addition is being made shall comply with the applicable requirements for the work as classified in this code.

~~B. Change~~ 2. Section 802 ~~to~~ Heights and Areas.

~~C. Change Sections 802.1 through 802.3, deleting subsections, of the IEBC to read:~~

802.1 Height limitations. No addition shall increase the height of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the VCC for new buildings.

802.2 Area limitations. No addition shall increase the area of an existing building beyond that permitted under the applicable provisions of Chapter 5 of the VCC for new buildings unless fire separation as required by the VCC is provided.

Exceptions: The following shall be permitted beyond that permitted by the VCC.

1. In-filling of floor openings such as elevator and exit stairway shafts.

2. The addition of nonoccupiable spaces such as elevators, stairs, and vestibules.

802.3 Fire protection systems. Existing fire areas increased by the addition shall comply with Chapter 9 of the VCC.

~~D. Delete Sections 802.4 through 802.6, including subsections, of the IEBC.~~

~~E. Change~~ 3. Section 803 ~~to~~ Structural.

~~F. Change Sections 803.1 through 803.4, including subsections, and delete Sections 803.1.1, 803.2.1.1, 803.2.2, 803.2.2.1, 803.2.3, 803.2.4, and 803.4.1 through 803.4.3, including subsections, of the IEBC.~~

803.1 Compliance with the VCC. Additions to existing buildings or structures are new construction and shall comply with the VCC.

803.2 Existing structural elements carrying gravity load. Any existing gravity load-carrying structural element for which an addition and its related alterations cause an increase in design gravity load of more than 5.0% shall be strengthened, supplemented, replaced, or otherwise altered as needed to carry the increased gravity load required by the VCC for new structures. Any existing gravity load-carrying structural element whose gravity load-carrying capacity is decreased shall be considered an altered element subject to the requirements of Section 603.7.3. Any existing element that will form part of the lateral load path for any part of the addition shall be considered an existing lateral load-carrying structural element subject to the requirements of Section 803.3.

Exception: Buildings of Group R occupancy with no more than five dwelling units or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the VCC or the provisions of the International Residential Code.

803.2.1 Design live load. Where the addition does not result in increased design live load, existing gravity load-carrying structural elements shall be permitted to be evaluated and designed for live loads approved prior to the

addition. If the approved live load is less than that required by Section 1607 of the VCC, the area designed for the nonconforming live load shall be posted with placards of approved design indicating the approved live load. Where the addition does result in increased design live load, the live load required by Section 1607 of the VCC shall be used.

803.3 Existing structural elements carrying lateral load. Where the addition is structurally independent of the existing structure, existing lateral load-carrying structural elements shall be permitted to remain unaltered. Where the addition is not structurally independent of the existing structure, the existing structure and its addition acting together as a single structure shall be shown to meet the requirements of Sections 1609 and 1613 of the VCC. For purposes of this section, compliance with ASCE 41, using a Tier 3 procedure and the two-level performance objective in Table 305.2.1 for the applicable risk category, shall be deemed to meet the requirements of Section 1613.

Exceptions:

1. Any existing lateral load-carrying structural element whose demand-capacity ratio with the addition considered is not more than 10% greater than its demand-capacity ratio with the addition ignored shall be permitted to remain unaltered. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces, and capacities shall account for the cumulative effects of additions and alterations since original construction. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations involving VCC-level seismic forces in accordance with Section 305.2.1.

2. Buildings of Group R occupancy with no more than five dwelling or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the VCC or the provisions of the International Residential Code.

3. Buildings in which the increase in the demand-capacity ratio is due entirely to the addition of rooftop-supported mechanical equipment individually having an operating weight less than 400 pounds (181.4 kg) and where the total additional weight of all rooftop equipment placed after initial construction of the building is less than 10% of the roof dead load. For the purposes of this exception, "roof" shall mean the roof level above a particular story.

803.4 Voluntary addition of structural elements to improve the lateral force-resisting system. Voluntary addition of structural elements to improve the lateral force-resisting system of an existing building shall comply with Section 603.7.5.

~~G. Add Section 803.5 to the IEBC to read:~~

803.5 Snow drift loads. Any structural element of an existing building ~~subjected~~ subject to additional loads from the effects of snow drift as a result of an addition shall comply with the VCC.

Exceptions:

1. Structural elements whose stress is not increased by more than 5.0%.

2. Buildings of Group R occupancy with no more than five dwelling units or sleeping units used solely for residential purposes where the existing building and the addition comply with the conventional light-frame construction methods of the VCC or the provisions of the International Residential Code.

~~H. Change~~ 4. Section 804 ~~to~~ Flood Hazard Areas.

~~I. Change Section 804.1 of the IEBC to read:~~

804.1 Flood hazard areas. Additions and foundations in flood hazard areas shall comply with the following requirements:

1. For horizontal additions that are structurally interconnected to the existing building:

1.1. If the addition and all other proposed work, when combined, constitute substantial improvement, the existing building and the addition shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

1.2. If the addition constitutes substantial improvement, the existing building and the addition shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

2. For horizontal additions that are not structurally interconnected to the existing building:

2.1. The addition shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

2.2. If the addition and all other proposed work when combined constitute substantial improvement, the existing building and the addition shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

3. For vertical additions and all other proposed work that when combined constitute substantial improvement, the existing building shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

4. For a raised or extended foundation, if the foundation work and all other proposed work when combined constitute substantial improvement, the existing building shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

5. For a new foundation or replacement foundation, the foundation shall comply with Section 1612 of the International Building Code or Section R322 of the International Residential Code, as applicable.

~~J. Change~~ 5. Section 805 ~~to~~ Energy Conservation.

~~K. Change Sections 805.1, 805.2, 805.3, 805.3.1, and 805.3.2 and add Sections 805.2.1, 805.2.1.1, 805.2.1.2, 805.2.1.3, 805.2.1.4, and 805.2.2 to the IEBC to read:~~

805.1 General. Additions to an existing building~~,~~ or portion thereof~~,~~ shall conform to the provisions of the VECC as those provisions relate to new construction without requiring the unaltered portion of the existing building to comply with the VECC. Additions shall not overload existing building systems. An addition shall be deemed to comply with the VECC if the addition alone complies or if the existing building and addition comply with the VECC as a single building.

805.2 Residential compliance. Residential additions shall comply with Section 805.2.1 or 805.2.2.

805.2.1 Prescriptive compliance. Additions shall comply with Sections 805.2.1.1 through 805.2.1.4.

805.2.1.1 Building envelope. New building envelope assemblies that are part of the addition shall comply with Sections R402.1, R402.2, R402.3.1 through R402.3.5, and R402.4 of the VECC.

Exception: The building envelope of the addition shall be permitted to comply through a Total UA analysis, as determined in Section R402.1.5 of the VECC, where the existing building and the addition~~,~~ and any alterations that are part of the project~~,~~ is less than or equal to the Total UA generated for the existing building.

805.2.1.2 Heating and cooling systems. New heating, cooling, and duct systems that are part of the addition shall comply with Section R403 of the VECC.

805.2.1.3 Service hot water systems. New service hot water systems that are part of the addition shall comply with Section R403.4 of the VECC.

805.2.1.4 Lighting. New lighting systems that are part of the addition shall comply with Section R404.1 of the VECC.

805.2.2 Performance compliance. The addition shall comply with the simulated performance alternative where the annual energy cost or energy use of the addition and the existing building~~,~~ and any alterations that are part of the project~~,~~ is less than or equal to the annual energy ~~code~~ cost of the existing building when modeled in accordance with Section R405 of the VECC.

805.3 Commercial Compliance. Commercial additions shall comply with Section 805.3.1 or 805.3.2.

Exception: Commercial additions complying with ANSI/ASHRAE/IESNA 90.1.805.3.1 Prescriptive compliance. Additions shall comply with Sections C402, C403, C404, and C405 of the VECC.

805.3.2 Performance compliance. The addition shall comply with the simulated performance alternative where the annual energy cost or energy use of the addition and the existing building~~,~~ and any alterations that are part of the project~~,~~ is less than or equal to the annual energy cost or use of the existing building when modeled in accordance with Section C407 of the VECC.

~~L. Delete Sections 805.3.1.1, 805.3.1.2, 805.3.1.2.1, 805.3.1.2.2, 805.3.1.2.3, 805.3.3 through 805.11.2, 806, 807, 808, 809, and 810, including Tables, of the IEBC.~~

13VAC5-63-434.5. Chapter 9 Historic buildings.

Replace Chapter 9 of the IEBC with the following:

~~A. Change Sections 901.1 and 901.2 of the IEBC to read:~~

1. Section 901 General.

901.1 Scope. It is the intent of this chapter to provide means for the preservation of historic buildings. The provisions of this code relating to construction involving historic buildings shall not be mandatory unless such construction constitutes a life safety hazard. Accessibility shall be provided in accordance with Section 405.

901.2 Report. The code official shall be permitted to require that a historic building undergoing repair, alteration, or change of occupancy be investigated and evaluated by ~~an RDP~~ a registered design professional or other qualified person or agency as a condition of determining compliance with this code.

~~B. Add Section 901.3 to the IEBC to read:~~

901.3 Special occupancy exceptions. When a building in Group R-3 is also used for Group A, B, or M purposes such as museum tours, exhibits, and other public assembly activities~~,~~ or for museums less than 3,000 square feet (279 m^2), the code official may determine that the occupancy is Group B when life safety conditions can be demonstrated in accordance with Section 901.2. Adequate means of egress in such buildings, which may include a means of maintaining doors in an open position to permit egress, a limit on building occupancy to an occupant load permitted by the means of egress capacity, a limit on occupancy of certain areas or floors, or supervision by a person knowledgeable in the emergency exiting procedures, shall be provided.

~~C. Change~~ 2. Section 902 ~~to~~ Flood hazard areas.

~~D. Change Section 902.1 of the IEBC to read:~~

902.1 Flood hazard areas. In flood hazard areas, if all proposed work, including repairs, work required because of a change of occupancy, and alterations, constitutes substantial improvement, then the existing building shall comply with Section 1612 of the International Building

Code or Section R322 of the International Residential Code, as applicable.

Exception: If ~~an~~ a historic building will continue to be ~~an~~ a historic building after the proposed work is completed, then the proposed work is not considered a substantial improvement. For the purposes of this exception, ~~an~~ a historic building is:

1. Listed or preliminarily determined to be eligible for listing in the National Register of Historic Places;

2. Determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district; or

3. Designated as historic under a state or local historic preservation program that is approved by the Department of Interior.

~~E. Delete Sections 902.1.1, 902.1.2, and 902.2 of the IEBC.~~

~~F. Change~~ 3. Section 903 ~~to~~ Repairs.

~~G. Change Sections 903.1 through 903.3, deleting subsections, of the IEBC to read:~~

903.1 General. Repairs to any portion of ~~an~~ a historic building or structure shall be permitted with original or like materials and original methods of construction, subject to the provisions of this chapter. Hazardous materials, such as asbestos and lead-based paint, shall not be used where the code for new construction would not permit their use in buildings of similar occupancy, purpose, and location.

903.2 Moved buildings. Foundations of moved historic buildings and structures shall comply with the VCC. Moved historic buildings shall otherwise be considered ~~an~~ a historic building for the purposes of this code. Moved historic buildings and structures shall be sited so that exterior wall and opening requirements comply with the VCC or with the compliance alternatives of this code.

903.3 Replacement. Replacement of existing or missing features using original materials shall be permitted. Partial replacement for repairs that match the original in configuration, height, and size shall be permitted. Replacement glazing in hazardous locations shall comply with the safety glazing requirements of Chapter 24 of the VCC.

Exception: Glass block walls, louvered windows, and jalousies repaired with like materials.

~~H. Delete the technical provisions of Section 904 in their entirety and change the title of Section 904 to read:~~

4. SECTION 904 (RESERVED).

~~I. Change~~ 5. Section 905 ~~to~~ Alterations.

~~J. Change Sections 905.1 and 905.2 of the IEBC to read:~~

905.1 General. The provisions of Chapter 6, as applicable, shall apply to facilities designated as historic structures that undergo alterations, unless technically infeasible.

905.2 Exit signs and egress path markings. Where new exit signs or egress path markings would damage the historic character of the building or structure, alternative exit signs and egress path markings are permitted with approval of the code official. Alternative signs and egress path markings shall identify the exits and egress path.

~~K. Delete Section 905.3 of the IEBC.~~

~~L. Change~~ 6. Section 906 ~~to~~ Change of Occupancy.

~~M. Change Sections 906.1 through 906.7 of the IEBC to read:~~

906.1 General. Historic buildings undergoing a change of occupancy shall comply with the applicable provisions of Chapter 7, except as specifically permitted in this chapter. When Chapter 7 requires compliance with specific requirements of Chapter 6 and when those requirements are subject to exceptions elsewhere in this code, the same exceptions shall apply to this section.

906.2 Building area. When a change of occupancy classification is made to a higher hazard category as indicated in Table 706.2, the allowable floor area for historic buildings undergoing a change of occupancy shall be permitted to exceed by 20% the allowable areas specified in Chapter 5 of the VCC.

906.3 Location on property. Historic structures undergoing a change of use to a higher hazard category in accordance with Section 707.1 may use alternative methods to comply with the fire-resistance and exterior opening protective requirements. Such alternatives shall comply with Section 901.2.

906.4 Occupancy separation. Required occupancy separations of one hour may be omitted when the building is provided with an approved automatic sprinkler system throughout.

906.5 Automatic fire-extinguishing systems. Every historical building or portion thereof~~,~~ that cannot be made to conform to the construction requirements specified in Chapter 7 or this chapter for the occupancy or use and such change constitutes a fire hazard~~,~~ shall be deemed to be in compliance if those spaces undergoing a change of occupancy are provided with an approved automatic fire-extinguishing system.

Exception: When the building official approves an alternative life-safety system.

906.6 Means of egress. Existing door openings and corridor and stairway widths less than those required elsewhere in this code shall be permitted, provided there is sufficient width and height for a person to pass through the opening or traverse the exit and that the capacity of the exit system is adequate for the occupant load or where

other operational controls to limit occupancy are approved by the code official.

906.7 Door swing. Existing front doors need not swing in the direction of exit travel, provided that other approved exits having sufficient capacity to serve the total occupant load are provided.

~~N. Add Sections 906.8 through 906.12 to the IEBC to read:~~

906.8 Transoms. In corridor walls required by Chapter 7 to be fire-resistance rated, existing transoms may be maintained if fixed in the closed position and fixed wired glass set in a steel frame or other approved glazing shall be installed on one side of the transom.

906.9 Interior finishes and trim materials. When a change of occupancy classification is made to a higher hazard category as indicated in Table 705.2, existing nonconforming interior finish and trim materials shall be permitted to be treated with an approved fire-retardant coating in accordance with the manufacturer's instructions to achieve the required fire rating.

Exception: Such nonconforming materials need not be treated with an approved fire-retardant coating where the building is equipped throughout with an automatic sprinkler system installed in accordance with the VCC and the nonconforming materials can be substantiated as being historic in character.

906.10 One-hour-fire-resistant assemblies. Where one-hour-fire-resistance-rated construction is required by this code, it need not be provided, regardless of construction or occupancy, where the existing wall and ceiling finish is wood lath and plaster.

906.11 Stairways, railings, and guards. Existing stairways, railings, and guards shall comply with the requirements of Section 705. The code official shall approve alternative stairways, railings, and guards if found to be acceptable or judged to meet the intent of Section 705.

Exception: For buildings less than 3,000 square feet (279 m^2), existing conditions are permitted to remain at all stairways, railings, and guards.

906.12 Exit stair live load. When a change of occupancy classification is made to a higher hazard category as indicated in Table 706.2, existing stairways shall be permitted to remain where it can be shown that the stairway can support a 75-pounds-per-square-foot (366 kg/m^2) live load.

~~O. Change~~ 7. Section 907 ~~to~~ Structural.

~~P. Change Section 907.1 of the IEBC to read:~~

907.1 General. Historic buildings shall comply with the applicable structural provisions for the work as classified in Section 103.9.

Exception: The code official shall be authorized to accept existing floors and approve operational controls that limit the live load on any such floor.

13VAC5-63-435. Chapter 10 Moved buildings and structures.

~~A. Change~~ Replace Chapter 10 of the IEBC with the following:

1. Section 1001 ~~to~~ General.

~~B. Change Sections 1001.1 through 1001.3, deleting subsections, of the IEBC to read:~~

1001.1 Scope. This chapter provides requirements for moved buildings and structures.

1001.2 Conformance. Any repair, alteration, or change of occupancy undertaken within the moved building or structure shall comply with the requirements of this code applicable to the work being performed. Any field fabricated elements shall comply with the requirements of the VCC or the International Residential Code as applicable.

1001.3 Required inspection and repairs. The code official shall be authorized to inspect~~,~~ or to require approved professionals to inspect at the expense of the owner~~,~~ the various structural parts of a moved building or structure to verify that structural components and connections have not sustained structural damage. Any repairs required by the code official as a result of such inspection shall be made prior to the final approval.

~~C. Change~~ 2. Section 1002 ~~to~~ Requirements.

~~D. Change Sections 1002.1 and 1002.2 and add Section 1002.2.1 to the IEBC to read:~~

1002.1 Location on the lot. The building or structure shall be located on the lot in accordance with the requirements of the VCC or the International Residential Code as applicable.

1002.2 Foundation. The foundation system of moved buildings and structures shall comply with the VCC or the International Residential Code as applicable.

1002.2.1 Connection to the foundation. The connection of the moved building or structure to the foundation shall comply with the VCC or the International Residential Code as applicable.

~~E. Add Sections 1002.3 through 1002.6, including subsections, to the IEBC to read:~~

1002.3 Wind loads. Buildings and structures shall comply with VCC or International Residential Code wind provisions at the new location as applicable.

Exceptions:

1. Detached one-family and two-family dwellings and Group U occupancies where wind loads at the new location are not higher than those at the previous location.

2. Structural elements whose stress is not increased by more than 10%.

1002.4 Seismic loads. Buildings and structures shall comply with VCC or International Residential Code seismic provisions at the new location as applicable.

Exceptions:

1. Structures in Seismic Design Categories A and B and detached one-family and two-family dwellings in Seismic Design Categories A, B, and C where the seismic loads at the new location are not higher than those at the previous location.

2. Structural elements whose stress is not increased by more than 10%.

1002.5 Snow loads. Buildings and structures shall comply with VCC or International Residential Code snow loads as applicable where snow loads at the new location are higher than those at the previous location.

Exception: Structural elements whose stress is not increased by more than 5.0%.

1002.6 Flood hazard areas. If moved into a flood hazard area, buildings and structures shall comply with Section 1612 of the VCC~~,~~ or Section R322 of the International Residential Code, as applicable.

~~F. Delete Sections 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, and 1011 of the IEBC in their entirety.~~

13VAC5-63-435.5. Chapter 11 Retrofit requirements.

Replace Chapter 11 of the IEBC with the following:

Section 1101 General:

1101.1 Scope. In accordance with Section 103.3, the following buildings are required to be provided with certain fire protection equipment or systems or other retrofitted components.

1101.2 Smoke alarms in colleges and universities. In accordance with § 36-99.3 of the Code of Virginia, college and university buildings containing dormitories for sleeping purposes shall be provided with battery-powered or AC-powered smoke alarm devices installed therein in accordance with this code in effect on July 1, 1982. All public and private college and university dormitories shall have installed such alarms regardless of when the building was constructed. The chief administrative office of the college or university shall obtain a certificate of compliance with the provisions of this subsection from the building official of the locality in which the college or university is located or, in the case of state-owned buildings, from the Director of the Virginia Department of General Services. The provisions of this section shall not apply to any dormitory at a state-supported military college or university that is patrolled 24 hours a day by military guards.

1101.3 Smoke alarms in certain juvenile care facilities. In accordance with § 36-99.4 of the Code of Virginia, battery-powered or AC-powered smoke alarms shall be installed in all local and regional detention homes, group homes, and other residential care facilities for children and juveniles that are operated by or under the auspices of the Virginia Department of Juvenile Justice, regardless of when the building was constructed, by July 1, 1986, in accordance with the provisions of this code that were in effect on July 1, 1984. Administrators of such homes and facilities shall be responsible for the installation of the smoke alarm devices.

1101.4 Smoke alarms for the deaf and hearing-impaired. In accordance with § 36-99.5 of the Code of Virginia, smoke alarms providing an effective intensity of not less than 100 candela to warn a deaf or hearing-impaired individual shall be provided, upon request by the occupant to the landlord or proprietor, to any deaf or hearing-impaired occupant of any of the following occupancies, regardless of when constructed:

1. All dormitory buildings arranged for the shelter and sleeping accommodations of more than 20 individuals;

2. All multiple-family dwellings having more than two dwelling units, including all dormitories and boarding and lodging houses arranged for shelter and sleeping accommodations of more than five individuals; or

3. All buildings arranged for use as one-family ~~or~~ and two-family dwelling units.

A tenant shall be responsible for the maintenance and operation of the smoke alarm in the tenant's unit.

A hotel or motel shall have available no fewer than one such smoke alarm for each 70 units or portion thereof, except that this requirement shall not apply to any hotel or motel with fewer than 35 units. The proprietor of the hotel or motel shall post in a conspicuous place at the registration desk or counter a permanent sign stating the availability of smoke alarms for the hearing impaired. Visual alarms shall be provided for all meeting rooms for which an advance request has been made.

1101.5 Assisted living facilities (formerly known as adult care residences or homes for adults). In accordance with § 36-99.5 of the Code of Virginia, existing assisted living facilities licensed by the Virginia Department of Social Services shall comply with Sections 1101.5.1 and 1101.5.2.

1101.5.1 Fire protective signaling system and fire detection system. A fire protective signaling system and an automatic fire detection system meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.

Exception: Assisted living facilities that are equipped throughout with a fire protective signaling system and an automatic fire detection system.

1101.5.2 Single-station and multiple-station smoke alarms. Battery-powered or AC-powered single-station and multiple-station smoke alarms meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in assisted living facilities by August 1, 1994.

Exception: Assisted living facilities that are equipped throughout with single-station and multiple-station smoke alarms.

1101.6 Smoke alarms in buildings containing dwelling units. AC-powered smoke alarms with battery backup or an equivalent device shall be required to be installed to replace a defective or inoperative battery-powered smoke alarm located in buildings containing one or more dwelling units or rooming houses offering to rent overnight sleeping accommodations when it is determined by the building official that the responsible party of such building or dwelling unit fails to maintain battery-powered smoke alarms in working condition.

1101.7 Fire suppression, fire alarm, and fire detection systems in nursing homes and facilities. In accordance with § 36-99.5 of the Code of Virginia, fire suppression systems as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing facilities licensed by the Virginia Department of Health by January 1, 1993, regardless of when such facilities or institutions were constructed. Units consisting of certified long-term care beds located on the ground floor of general hospitals shall be exempt from the requirements of this section.

Fire alarm or fire detector systems~~,~~ or both, as required by the edition of this code in effect on October 1, 1990, shall be installed in all nursing homes and nursing facilities licensed by the Virginia Department of Health by August 1, 1994.

1101.8 Fire suppression systems in hospitals. In accordance with § 36-99.1 of the Code of Virginia, fire suppression systems shall be installed in all hospitals licensed by the Virginia Department of Health as required by the edition of this code in effect on October 1, 1995, regardless of when such facilities were constructed.

1101.9 Identification of disabled parking spaces by above grade signage. In accordance with § 36-99.11 of the Code of Virginia, all parking spaces reserved for the use of persons with disabilities shall be identified by ~~above-grade~~ above-grade signs, regardless of whether identification of such spaces by ~~above-grade~~ above-grade signs was required when any particular space was reserved for the use of persons with disabilities. A sign or symbol painted or otherwise displayed on the pavement of a parking space shall not constitute an ~~above-grade~~ above-grade sign. Any parking space not identified by an ~~above-grade~~ above-grade sign shall not be a parking space reserved for the disabled within the meaning of this section. All ~~above-grade~~ above-grade disabled parking space signs shall have the bottom edge of the sign no lower than ~~4~~ four feet (1219 mm) nor higher than ~~7~~ seven feet (2133 mm) above the parking surface. Such signs shall be designed and constructed in accordance with the provisions of Chapter 11 of this code. All disabled parking signs shall include the following language: "PENALTY, $100-500 Fine, TOW-AWAY ZONE." Such language may be placed on a separate sign and attached below existing ~~above-grade~~ above-grade disabled parking signs, provided that the bottom edge of the attached sign is no lower than ~~4~~ four feet above the parking surface.

1101.10 Smoke alarms in hotels and motels. Smoke alarms shall be installed in hotels and motels as required by the ~~edition of VR 394-01-22,~~ USBC, Volume II, (13VAC5-63-400 through 13VAC5-63-445) in effect on March 1, 1990, by the dates indicated, regardless of when constructed.

1101.11 Sprinkler systems in hotels and motels. By September 1, 1997, an automatic sprinkler system shall be installed in hotels and motels as required by the ~~edition of VR 394-01-22,~~ USBC, Volume II, (13VAC5-63-400 through 13VAC5-63-445) in effect on March 1, 1990, regardless of when constructed.

1101.12 Fire suppression systems in dormitories. In accordance with § 36-99.3 of the Code of Virginia, an automatic fire suppression system shall be provided throughout all buildings having a Group R-2 fire area that are more than 75 feet (22,860 mm) or six stories above the lowest level of exit discharge and are used, in whole or in part, as a dormitory to house students by any public or private institution of higher education, regardless of when such buildings were constructed, in accordance with the edition of this code in effect on August 20, 1997, and the requirements for sprinkler systems under the edition of the NFPA 13 standard referenced by that code. The automatic fire suppression system shall be installed by September 1, 1999. The chief administrative office of the college or university shall obtain a certificate of compliance from the building official of the locality in which the college or university is located or, in the case of state-owned buildings, from the Director of the Virginia Department of General Services.

Exceptions:

1. Buildings equipped with an automatic fire suppression system in accordance with Section 903.3.1.1 of the VCC or the 1983 or later editions of NFPA 13.

2. Any dormitory at a state-supported military college or university that is patrolled 24 hours a day by military guards.

3. Application of the requirements of this section shall be modified in accordance with the following:

3.1. Building systems, equipment, or components other than the fire suppression system shall not be required to be added or upgraded except as necessary for the installation

of the fire suppression system and shall only be required to be added or upgraded where the installation of the fire suppression system creates an unsafe condition.

3.2. Residential sprinklers shall be used in all sleeping rooms. Other sprinklers shall be quick response or residential unless deemed unsuitable for a space. Standard response sprinklers shall be used in elevator hoistways and machine rooms.

3.3. Sprinklers shall not be required in wardrobes in sleeping rooms that are considered part of the building construction or in closets in sleeping rooms when such wardrobes or closets (i) do not exceed 24 square feet (2.23 m^2) in area, (ii) have the smallest dimension less than 36 inches (914 mm), and (iii) comply with all of the following:

3.3.1. A single-station smoke alarm monitored by the building fire alarm system is installed in the room containing the wardrobe or closet that will activate the general alarm for the building if the single station smoke alarm is not cleared within five minutes after activation.

3.3.2. The minimum number of sprinklers required for calculating the hydraulic demand of the system for the room shall be increased by two, and the two additional sprinklers shall be corridor sprinklers where the wardrobe or closet is used to divide the room. Rooms divided by a wardrobe or closet shall be considered one room for the purpose of this requirement.

3.3.3. The ceiling of the wardrobe, closet, or room shall have a fire resistance rating of not less than 1/2 hour.

3.4. Not more than one sprinkler shall be required in bathrooms within sleeping rooms or suites having a floor area between 55 square feet (5.12 m^2) and 120 square feet (11.16 m^2), provided the sprinkler is located to protect the lavatory area and the plumbing fixtures are of a noncombustible material.

3.5. Existing standpipe residual pressure shall be permitted to be reduced when the standpipe serves as the water supply for the fire suppression system, provided the water supply requirements of NFPA 13-94 are met.

3.6. Limited service controllers shall be permitted for fire pumps when used in accordance with their listing.

3.7. Where a standby power system is required, a source of power in accordance with Section 701-11(d) or 701-11(e) of NFPA 70-96 shall be permitted.

1101.13 Fire extinguishers and smoke alarms in state regulated care facilities (SRCFs). SRCFs shall be provided with at least one approved type ABC portable fire extinguisher with a minimum rating of ~~2A10BC~~ 2A:10B:C installed in each kitchen. In addition, SRCFs shall provide at least one approved and properly installed ~~battery-operated~~ battery-operated smoke alarm outside of each sleeping area in the vicinity of bedrooms and bedroom hallways and on each additional floor.

1101.14 Smoke alarms in adult day care centers. In accordance with § 36-99.5 of the Code of Virginia, battery-powered or AC-powered smoke alarm devices shall be installed in all adult day care centers licensed by the Virginia Department of Social Services, regardless of when the building was constructed. The location and installation of the smoke alarms shall be determined by the provisions of this code in effect on October 1, 1990. The licensee shall obtain a certificate of compliance from the building official of the locality in which the center is located or, in the case of state-owned buildings, from the Director of the Virginia Department of General Services.

1101.15 Posting of occupant load. Every room or space that is an assembly occupancy~~,~~ and where the occupant load of that room or space is 50 or more~~,~~ shall have the occupant load of the room or space as determined by the building official posted in a conspicuous place near the main exit or exit access doorway from the room or space. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or owner's authorized agent.

1101.16 ALFSTs. Existing aboveground liquid fertilizer storage tanks (ALFSTs), regardless of when constructed, shall by October 1, 2011, meet the applicable requirements of API 653 and TFI RMIP for suitability for service and inspections and shall provide a secondary containment system complying with Section 430.3 of the VCC.

1101.17 Address identification. Existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be a minimum of ~~4~~ four inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of private road and the building address cannot be viewed from the public way, a monument, pole, or other approved sign or means shall be used to identify the structure.

1101.18 Fire department connection sign. On existing buildings, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign mounted on the street front or on the side of the building. Such sign shall have the letters "FDC" not less than ~~6~~ six inches (152 mm) high and words in letters not less than ~~2~~ two inches (51 mm) high or an arrow to indicate the location. Such signs shall be maintained and subject to the approval of the fire code official.

13VAC5-63-438. Chapter 12 Construction safeguards.

Replace Chapter 12 of the IEBC with the following:

1. Section 1201 General.

1201.1 Scope. The provisions of this chapter shall govern safety during construction that is under the jurisdiction of this code and the protection of adjacent public and private properties.

1201.2 Storage and placement. Construction equipment and materials shall be stored and placed so as not to endanger the public, the workers, or adjoining property for the duration of the construction project.

1201.3 Alterations, repairs, and additions. Required exits, existing structural elements, fire protection devices, and sanitary safeguards shall be maintained at all times during alterations, repairs, or additions to any building or structure.

Exceptions:

1. When such required elements or devices are being altered or repaired, adequate substitute provisions shall be made.

2. When the existing building is not occupied.

1201.4 Manner of removal. Waste materials shall be removed in a manner ~~which~~ that prevents injury or damage to persons, adjoining properties, and public rights-of-way.

1201.5 Fire safety during construction. Fire safety during construction shall comply with the applicable requirements of the International Building Code and the applicable provisions of Chapter 33 of the International Fire Code.

1201.6 Protection of pedestrians. Pedestrians shall be protected during construction and demolition activities as required by Sections 1201.6.1 through 1201.6.7 and Table 1201.6. Signs shall be provided to direct pedestrian traffic.

1201.6.1 Walkways. A walkway shall be provided for pedestrian travel in front of every construction and demolition site unless the applicable governing authority authorizes the sidewalk to be fenced or closed. Walkways shall be of sufficient width to accommodate the pedestrian traffic, but in no case shall they be less than ~~4~~ four feet (1219 mm) in width. Walkways shall be provided with a durable walking surface. Walkways shall be accessible in accordance with Chapter 11 of the International Building Code and shall be designed to support all imposed loads and in no case shall the design live load be less than 150 pounds per square foot (psf) (7.2 kN/m^2).

1201.6.2 Directional barricades. Pedestrian traffic shall be protected by a directional barricade where the walkway extends into the street. The directional barricade shall be of sufficient size and construction to direct vehicular traffic away from the pedestrian path.

1201.6.3 Construction railings. Construction railings shall be at least 42 inches (1067 mm) in height and shall be sufficient to direct pedestrians around construction areas.

1201.6.4 Barriers. Barriers shall be a minimum of ~~8~~ eight feet (2438 mm) in height and shall be placed on the side of the walkway nearest the construction. Barriers shall extend the entire length of the construction site. Openings in such barriers shall be protected by doors which are normally kept closed.

1201.6.4.1 Barrier design. Barriers shall be designed to resist loads required in Chapter 16 of the International Building Code unless constructed as follows:

1. Barriers shall be provided with ~~2 inch~~ two-inch by ~~4 inch~~ four-inch (51 mm by 102 mm) top and bottom plates.

2. The barrier material shall be a minimum of 3/4-inch (19.1 mm) boards or 1/4-inch (6.4 mm) wood structural use panels.

3. Wood structural use panels shall be bonded with an adhesive identical to that for exterior wood structural use panels.

4. Wood structural use panels 1/4-inch (6.4 mm) or 1/16-inch (1.6 mm) in thickness shall have studs spaced not more than ~~2~~ two feet (610 mm) on center.

5. Wood structural use panels 3/8-inch (9.5 mm) or 1/2-inch (12.7 mm) in thickness shall have studs spaced not more than ~~4~~ four feet (1219 mm) on center, provided a ~~2 inch~~ two-inch by ~~4 inch~~ four-inch (51 mm by 102 mm) stiffener is placed horizontally at the mid-height where the stud spacing exceeds ~~2~~ two feet (610 mm) on center.

6. Wood structural use panels 5/8-inch (15.9 mm) or thicker shall not span over ~~8~~ eight feet (2438 mm).

1201.6.5 Covered walkways. Covered walkways shall have a minimum clear height of ~~8~~ eight feet (2438 mm) as measured from the floor surface to the canopy overhead. Adequate lighting shall be provided at all times. Covered walkways shall be designed to support all imposed loads. In no case shall the design live load be less than 150 psf (7.2 kN/m^2) for the entire structure.

Exception: Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories above grade plane are permitted to be designed for a live load of 75 psf (3.6 kN/m^2) or the loads imposed on them, whichever is greater. In lieu of such designs, the roof and supporting structure of a covered walkway are permitted to be constructed as follows:

1. Footings shall be continuous ~~2 inch~~ two-inch by ~~6 inch~~ six-inch members.

2. Posts not less than ~~4 inches~~ four inches by ~~6 inches~~ six inches shall be provided on both sides of the roof and spaced not more than 12 feet (3658 mm) on center.

3. Stringers not less than ~~4 inches~~ four inches by ~~12 inches~~ 12 inches shall be placed on edge upon the posts.

4. Joists resting on the stringers shall be at least ~~2 inches~~ two inches by ~~8 inches~~ eight inches and shall be spaced not more than ~~2~~ two feet (610 mm) on center.

5. The deck shall be planks at least ~~2~~ two inches (51 mm) thick or wood structural panels with an exterior exposure durability classification at least ~~2 3/32 inch~~ 23/32-inch (18.3 mm) thick nailed to the joists.

6. Each post shall be knee-braced to joists and stringers by ~~2 inch~~ two-inch by ~~4 inch~~ four-inch minimum members ~~4~~ four feet (1219 mm) long.

7. A ~~2 inch~~ two-inch by ~~4 inch~~ four-inch minimum curb shall be set on edge along the outside edge of the deck.

1201.6.6 Repair, maintenance, and removal. Pedestrian protection required by Section 1201.6 shall be maintained in place and kept in good order for the entire length of time pedestrians may be endangered. The owner or the owner's agent, upon the completion of the construction activity, shall immediately remove walkways, debris, and other obstructions and leave such public property in as good a condition as it was before such work was commenced.

TABLE 1201.6
PROTECTION OF PEDESTRIANS

HEIGHT OF CONSTRUCTION	DISTANCE OF CONSTRUCTION TO LOT LINE	TYPE OF PROTECTION REQUIRED
8 feet or less	Less than 5 feet	Construction railings
	5 feet or more	None
More than 8 feet	Less than 5 feet	Barrier and covered walkway
	5 feet or more, but not more than 1/4 the height of construction	Barrier and covered walkway
	5 feet or more, but between 1/4 and 1/2 the height of construction	Barrier
	5 feet or more, but exceeding 1/2 the height of construction	None

1201.6.7 Adjacent to excavations. Every excavation on a site located ~~5~~ five feet (1524 mm) or less from the street lot line shall be enclosed with a barrier not less than ~~6~~ six feet (1829 mm) high. Where located more than ~~5~~ five feet (1524 mm) from the street lot line, a barrier shall be erected when required by the code official. Barriers shall be of adequate strength to resist wind pressure as specified in Chapter 16 of the International Building Code.

~~1201.7 Facilities required. Sanitary facilities shall be provided during construction or demolition activities in accordance with the International Plumbing Code.~~

1201.8 Separations between construction areas. Separations used in Type I and Type II construction to separate construction areas from occupied portions of the building shall be constructed of materials that comply with one of the following:

1. Noncombustible materials.

2. Materials that exhibit a flame spread index not exceeding 25 when tested in accordance with ASTM E84 or UL 723.

3. Materials exhibiting a peak heat release rate not exceeding 300 kW/m^2 when tested in accordance with ASTM E1354 at an incident heat flux of 50 kW/m^2 in the horizontal orientation on specimens at the thickness intended for use.

2. Section 1202 Protection of Adjoining Properties.

1202.1 Protection required. Adjoining public and private property shall be protected from damage during construction and demolition work. Protection must be provided for footings, foundations, party walls, chimneys, skylights, and roofs. Provisions shall be made to control water runoff and erosion during construction or demolition activities. The person making or causing an excavation to be made shall provide written notice to the owners of adjoining buildings advising them that the excavation is to be made and that the adjoining buildings should be protected. This notification shall be delivered not less than 10 days prior to the scheduled starting date of the excavation.

3. Section 1203 Temporary Use of Streets, Alleys and Public Property.

1203.1 Storage and handling of materials. The temporary use of streets or public property for the storage or handling of materials or equipment required for construction or demolition and the protection provided to the public shall comply with the provisions of the applicable governing authority and this chapter.

1203.2 Obstructions. Construction materials and equipment shall not be placed or stored so as to ~~obstruct~~ interfere with access to fire hydrants, standpipes, fire or police alarm boxes, catch basins, or manholes nor shall such material or equipment be located within 20 feet (6.1 m) of a street intersection or placed so as to obstruct normal observations of traffic signals or to hinder the use of public transit loading platforms.

1203.3 Utility fixtures. Building materials, fences, sheds, or any obstruction of any kind shall not be placed to obstruct free approach to any fire hydrant, fire department connection, utility pole, manhole, fire alarm box, or catch

basin or to interfere with the passage of water in the gutter. Protection against damage shall be provided to such utility fixtures during the progress of the work, but sight of them shall not be obstructed.

4. Section 1204 Fire Extinguishers.

1204.1 Where required. All structures under construction, alteration, or demolition shall be provided with not less than one approved portable fire extinguisher in accordance with Section 906 of the International Building Code and sized for not less than ordinary hazard as follows:

1. At each stairway on all floor levels where combustible materials have accumulated.

2. In every storage and construction shed.

3. Additional portable fire extinguishers shall be provided where special hazards exist including the storage and use of flammable and combustible liquids.

1204.2 Fire hazards. The provisions of this code and of the International Fire Code shall be strictly observed to safeguard against all fire hazards attendant upon construction operations.

5. Section 1205 Means of Egress.

1205.1 Stairways required. Where a building has been constructed to a building height of 50 feet (15,240 mm) or four stories~~,~~ or where an existing building exceeding 50 feet (15,240 mm) in building height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses.

1205.2 Maintenance of means of egress. Required means of egress shall be maintained at all times during construction, demolition, remodeling or alterations, and additions to any building.

Exception: Approved temporary means of egress systems and facilities.

6. Section 1206 Standpipe Systems.

1206.1 Where required. In buildings required to have standpipes by Section 905.3.1 of the International Building Code, not less than one standpipe shall be provided for use during construction. Such standpipes shall be installed prior to construction exceeding 40 feet (12,192 mm) in height above the lowest level of fire department vehicle access. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairways. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.

1206.2 Buildings being demolished. Where a building or portion of a building is being demolished and a standpipe ~~is existing~~ exists within such a building, such standpipe shall be maintained in an operable condition so as to be available for use by the fire department. Such standpipe shall be demolished with the building but shall not be demolished more than one floor below the floor being demolished.

1206.3 Detailed requirements. Standpipes shall be installed in accordance with the provisions of Chapter 9 of the International Building Code.

Exception: Standpipes shall be either temporary or permanent in nature and with or without a water supply, provided that such standpipes conform to the requirements of Section 905 of the International Building Code as to capacity, outlets, and materials.

7. Section 1207 Automatic Sprinkler System.

1207.1 Completion before occupancy. In portions of a building where an automatic sprinkler system is required by this code, it shall be unlawful to occupy those portions of the building until the automatic sprinkler system installation has been tested and approved, except as provided in Section ~~110.3~~ 116.1.1 of the VCC.

1207.2 Operation of valves. Operation of sprinkler control valves shall be permitted only by properly authorized personnel and shall be accompanied by notification of duly designated parties. When the sprinkler protection is being regularly turned off and on to facilitate connection of newly completed segments, the sprinkler control valves shall be checked at the end of each work period to ascertain that protection is in service.

8. Section 1208 Accessibility.

1208.1 Construction sites. Structures, sites, and equipment directly associated with the actual process of construction, including scaffolding, bridging, material hoists, material storage, or construction trailers, are not required to be accessible.

9. Section 1209 Water Supply for Fire Protection.

1209.1 When required. An approved water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material arrives on the site, on commencement of vertical combustible construction, and on installation of a standpipe system during alterations, repairs, or additions to any building or structure in accordance with the Virginia Statewide Fire Prevention Code.

10. Section 1210 Demolition.

1210.1 Construction documents. Construction documents and a schedule for demolition shall be submitted where required by the building official. Where such information is required, no work shall be done until such construction documents, schedule, or both are approved.

1210.2 Pedestrian protection. The work of demolishing any building shall not be commenced until pedestrian protection is in place as required by Chapter 33 of the VCC.

1210.3 Means of egress. A horizontal exit shall not be destroyed unless and until a substitute means of egress has been provided and approved.

1210.4 Vacant lot. Where a structure has been demolished or removed, the vacant lot shall be filled and maintained to the existing grade or in accordance with the ordinances of the jurisdiction having authority.

1210.5 Water accumulation. ~~Provision~~ Provisions shall be made to prevent the accumulation of water or damage to any foundations on the premises or the adjoining property.

1210.6 Utility connections. Service utility connections shall be discontinued and capped in accordance with the approved rules and the requirements of the applicable governing authority.

1210.7 Fire safety during demolition. Fire safety during demolition shall comply with the applicable requirements of the VCC and the applicable provisions of Chapter 33 of the International Fire Code.

13VAC5-63-439. Chapter 13 Referenced standards.

Replace Chapter 13 of the IEBC with the following:

Referenced standards are listed in the following table:

Standard reference number	Title	~~Referenced in code section number~~
ACI 562-21	Assessment, Repair, and Rehabilitation of Existing Concrete Structures	~~502.1.1~~
API 653-09	Tank Inspection, Repair, Alteration and Reconstruction	~~1101.16~~
ASCE/SEI 7-16	American Society of Civil Engineers Structural Engineering Institute	~~305.2.1, 603.7.4, 603.7.6~~
ASCE/SEI 41-17	American Society of Civil Engineers Structural Engineering Institute	~~305.2, 305.2.1, 305.2.2, 502.3.1, 502.3.3, 603.7.4, 603.7.5, 603.7.6, 803.3~~
ASHRAE 62.1-2016	American Society of Heating, Refrigerating and Air Conditioning Engineers	~~603.5~~
ASHRAE 90.1-2016	American Society of Heating, Refrigerating and Air Conditioning Engineers	~~805.3~~
ASME A17.1/CSA B44-2016	American Society of Mechanical Engineers	~~404.4.2~~
ASME A18.1-2014	American Society of Mechanical Engineers	~~404.4.3~~
ASTM F2006-17	ASTM International	~~304.2~~
ASTM F2090-17	ASTM International	~~304.2~~
~~IBC-18~~ IBC-21	International Building Code	~~404.4.10.1, 706.3.1, 804.1, 902.1, 1201.5, 1201.6.1, 1201.6.4.1, 1201.6.7, 1204.1, 1206.1, 1206.3, 1403.19~~
ICC ~~A117.1-09~~ A117.1-17	Accessible and Usable Buildings and Facilities	~~404.4.2, 404.4.3, 404.4.10~~
~~IECC-18~~ IECC-21	International Energy Conservation Code	~~602.3.2~~
~~IFC-18~~ IFC-21	International Fire Code	~~103.3, 1201.5, 1204.2, 1210.7~~
~~IFGC-18~~ IFGC-21	International Fuel Gas Code	~~602.3.3~~
~~IMC-18~~ IMC-21	International Mechanical Code	~~602.3.2, 709.1, 1403.7.1, 1403.8, 1403.8.1~~
~~IPC-18~~ IPC-21	International Plumbing Code	~~506.1, 602.3.2, 603.6, 710.1, 710.2, 1201.7~~
~~IRC-18~~ IRC-21	International Residential Code	~~304.3, 503.1, 601.3, 603.7.3, 803.2, 803.3, 803.5, 804.1, 902.1, 1001.2, 1002.1, 1002.2, 1002.3, 1002.5, 1002.6, 1401.3, 1401.5~~
NFPA ~~13-16~~ 13-19	Standard for the Installation of Sprinkler Systems	~~1101.12~~
NFPA 70-96	National Electrical Code	~~1101.12~~

NFPA ~~70-17~~ 70-20	National Electrical Code	~~504.1.1, 504.1.2, 504.1.3, 504.1.4, 504.1.5, 708.1, 708.2, 708.3~~
NFPA 99-18	Health Care Facilities Code	~~504.1.4~~
UL ~~217-06~~ 217-15	Single and Multiple Station Smoke Alarms - with revisions through ~~October 2015~~ November 2016	~~302.3~~
TFI RMIP-09	Aboveground Storage Tanks Containing Liquid Fertilizer, Recommended Mechanical Integrity Practices	~~1101.16~~

13VAC5-63-440. Chapter 14 Compliance alternative - Change of occupancy.

Replace Chapter 14 of the IEBC with the following:

Section 1401 General

1401.1 Scope. The provisions of this chapter are ~~intended to maintain or increase the current degree of public safety, health, and general welfare in existing buildings or structures, while permitting changes of occupancy without requiring full compliance with Chapter 7, except where compliance with other provisions of this code is specifically required in this chapter~~ applicable when the exception to Section 701.1 is applied.

~~Exception: The provisions of this chapter shall not apply to buildings with occupancies in Group H or I.~~

1401.2 ~~Complete change~~ Change of occupancy. ~~Where an entire existing building undergoes a change of occupancy, the applicable provisions of this chapter for the new occupancy shall be used to determine compliance with this code~~ The change of occupancy shall be evaluated in accordance with the evaluation process specified in Sections 1402 through 1404.

~~Exception: Plumbing, mechanical, and electrical systems in buildings undergoing a change of occupancy shall be subject to any applicable requirements of Chapter 7.~~

1401.2.1 Plumbing, mechanical, and electrical systems. Plumbing, mechanical, and electrical systems shall conform to the applicable requirements of Sections 708, 709, and 710.

1401.3 ~~Partial~~ Work undertaken in connection with a change of occupancy. ~~Where a portion of the building undergoes a change of occupancy and that portion is separated from the remainder of the building with fire barrier or horizontal assemblies having a fire resistance rating as required by Table 508.4 of the VCC or Section R317 of the International Residential Code for the separate occupancies, or with approved compliance alternatives, the portion changed shall be made to conform to the provisions of this chapter~~ Any repairs, alterations, or additions undertaken in connection with a change of occupancy shall conform to the applicable requirements of this code for the work as classified in this code and as modified by this chapter.

~~Where a portion of the building undergoes a change of occupancy and that portion is not separated from the remainder of the building with fire barriers or horizontal assemblies having a fire resistance rating as required by Table 508.4 of the VCC or Section R317 of the International Residential Code for the separate occupancies, or with approved compliance alternatives, the provisions of this chapter which apply to each occupancy shall apply to the entire building. Where there are conflicting provisions, those requirements that are the most restrictive shall apply to the entire building or structure.~~

~~1401.4 Accessibility requirements. All portions of the building proposed for a change of occupancy shall conform to the applicable accessibility provisions of Chapter 4.~~

~~1401.5 Compliance with flood hazard provisions. In flood hazard areas, buildings or structures that are evaluated in accordance with this chapter shall comply with Section 1612 of the VCC or Section R322 of the VRC, as applicable if the work covered by this chapter constitutes substantial improvement.~~

Section 1402 Evaluation Process

1402.1 Evaluation process. The evaluation process specified ~~herein~~ in this section shall be followed in its entirety to evaluate existing buildings for work covered by this chapter. The existing building shall be evaluated in accordance with the provisions of this section and Sections 1403 and ~~1401.4~~ 1404. The evaluation shall be comprised of three categories as described in Sections 1402.1.1 through 1402.1.3.

1402.1.1 Fire safety. Included within the fire safety category are the structural fire resistance, automatic fire detection, fire alarm, automatic sprinkler system, and fire suppression system features of the facility.

1402.1.2 Means of egress. Included within the means of egress category are the configuration, characteristics, and support features for means of egress in the facility.

1402.1.3 General safety. Included within the general safety category are the fire safety parameters and the means-of-egress parameters.

1402.2 Occupancy basis. The evaluation of the building per this chapter shall be based on the new occupancy. A partial building change of occupancy shall be evaluated in accordance with Section 1402.2.1 or 1402.2.2 as applicable.

1402.2.1 Separated change of occupancy. Where a portion of the building undergoes a change of occupancy and that portion is separated from the remainder of the building in accordance with Section 508.4 of the VCC, only the portion of building undergoing the change of occupancy shall conform to the provisions of this chapter based on the new occupancy classification.

1402.2.2 Nonseparated change of occupancy. Where a portion of the building undergoes a change of occupancy and that portion is not separated from the remainder of the building in accordance with Section 508.4 of the VCC, the provisions of this chapter shall apply to the entire building based on all the occupancy classifications in the building.

~~1402.2~~ 1402.3 Structural evaluation. The existing building shall be evaluated to determine adequacy of the existing structural systems for the proposed change of occupancy. The evaluation shall demonstrate that the existing building with the work completed is capable of resisting the loads specified in Chapter 16 of the VCC.

~~1402.3~~ 1402.4 Submittal. The results of the evaluation as required in Section 1402.1 shall be submitted to the code official. Table 1404.1 shall be utilized for tabulating the results of the evaluation. References to other sections of this code indicate that compliance with those sections is required in order to gain credit in the evaluation ~~herein~~ outlined in this section.

Section 1403 Evaluation data

1403.1 Building height and number of stories. The value for building height and number of stories shall be the lesser value determined by the formula in Section 1403.1.1. Section 504 of the VCC shall be used to determine the allowable height and number of stories of the building. Subtract the actual building height from the allowable height and divide by 12-1/2 feet (3810 mm). Enter the height value and its sign (positive or negative) in Table 1404.1 under Safety Parameter 1403.1, Building Height, for fire safety, means of egress, and general safety. The maximum score for a building shall be 10.

1403.1.1 Height formula. The following formulas shall be used in computing the building height value~~. Equation 14-1~~:

$$Height\ value, feet = \frac{(AH) - (EBH)}{12.5} \times CF$$

(Equation 14-1)

Note: Where mixed occupancies are separated and individually evaluated as indicated in Section 1404.3.1, the values AH, AS, EBH, and EBS shall be based on the height of the occupancy being evaluated.

~~Equation 14-2:~~

$$\text{Height value, stories} = (AS - EBS) \times CF$$

(Equation 14-2)

AH = Allowable height in feet (mm) from Section 504 of the VCC.

EBH = Existing building height in feet (mm).

AS = Allowable height in stories from Section 504 of the VCC.

EBS = Existing building height in stories.CF = 1 if (AH) - (EBH) is positive.

CF = Construction-type factor shown in Table 1403.6(2) if (AH) - (EBH) is negative.

1403.2 Building area. The value for building area shall be determined by the formula in Section 1403.2.2. Section 506 of the VCC and the formula in Section 1403.2.1 shall be used to determine the allowable area of the building. Subtract the actual building area from the allowable area and divide by 1,200 square feet (112 m^2). Enter the area value and its sign (positive or negative) in Table 1404.1 under Safety Parameter 1403.2, Building Area, for fire safety, means of egress, and general safety. In determining the area value, the maximum permitted positive value for area is 50% of the fire safety score as listed in Table 1404.2, Mandatory Safety Scores.

1403.2.1 Allowable area formula. The following formula shall be used in computing allowable area:

~~Equation 14-3:~~

$$A_a = A_t(NS \times I_f)$$

EDITOR'S NOTE: Equation 14-3 is amended in the following manner:

$$A_a = A_t + (NS \times I_f)$$

(Equation 14-3)

where:

A_a = Allowable building area per story (square feet).

A_t = Tabular allowable area factor (NS, S1, S13R, or SM value, as applicable) in accordance with Table 506.2 of the VCC.

N_S = Tabular allowable area factor in accordance with Table 506.2 of the VCC for a nonsprinklered building (regardless of whether the building is sprinklered).

I_f = Area factor increase due to frontage as calculated in accordance with Section 506.3 of the VCC.

1403.2.2 Area formula. The following formula shall be used in computing the area value. Determine the area value for

each occupancy floor area on a floor-by-floor basis. For each occupancy, choose the minimum area value of the set of values obtained for the particular occupancy.

~~Equation 14-4:~~

$$Actual\ value_i = \frac{Allowable\ area_i}{1200\ square\ feet}\left[1-\left(\frac{Actual\ area_i}{Allowable\ area_i}+\ldots+\frac{Actual\ area_n}{Allowable\ area_n}\right)\right]$$

EDITOR'S NOTE: Equation 14-4 is amended in the following manner:

$$\text{Area value}_i = \frac{\text{Allowable area}_i}{1200\,\text{square feet}}\left[1-\left(\frac{\text{Actual area}_i}{\text{Allowable area}_i}+\ldots+\frac{\text{Actual area}_n}{\text{Allowable area}_n}\right)\right]$$

(Equation 14-4)

where:

i = Value for an individual separated occupancy on a floor.

n = Number of separated occupancies on a floor.

1403.3 Compartmentation. Evaluate the compartments created by fire barriers or horizontal assemblies that comply with Sections 1403.3.1 and 1403.3.2 and which are exclusive of the wall elements considered under Sections 1403.4 and 1403.5. Conforming compartments shall be figured as the net area and do not include shafts, chases, stairways, walls, or columns. Using Table 1403.3, determine the appropriate compartmentation value (CV) and enter that value into Table 1404.1 under Safety Parameter 1403.3, Compartmentation, for fire safety, means of egress, and general safety. For compartment sizes that fall between categories, the determination of the CV shall be permitted to be obtained by linear interpolation.

TABLE 1403.3 COMPARTMENTATION VALUES

OCCUPANCY	CATEGORIES				
	a Compartment size equal to or greater than 15,000 square feet	b Compartment size of 10,000 square feet	c Compartment size of 7,500 square feet	d Compartment size of 5,000 square feet	e Compartment size of 2,500 square feet or less
A-1, A-3	0	6	10	14	18
A-2	0	4	10	14	18
A-4, B, E, S-2	0	5	10	15	20
F, M, R, S-1	0	4	10	16	22

For SI: 1 square foot = 0.0929m^2.

1403.3.1 Wall construction. A wall used to create separate compartments shall be a fire barrier conforming to Section 707 of the VCC with a fire-resistance rating of not less than two hours. Where the building is not divided into more than one compartment, the compartment size shall be taken as the total floor area on all floors. Where there is more than one compartment within a story, each compartmented area on such story shall be provided with a horizontal exit conforming to Section 1026 of the VCC. The fire door serving as the horizontal exit between compartments shall be so installed, fitted, and gasketed that such fire door will provide a substantial barrier to the passage of smoke.

1403.3.2 Floor/ceiling construction. A floor/ceiling assembly used to create compartments shall conform to Section 711 of the VCC and shall have a fire-resistance rating of not less than two hours.

1403.4 Tenant and dwelling unit separations. Evaluate the fire-resistance rating of floors and walls separating tenants, including dwelling units, and not evaluated under Sections 1403.3 and 1403.5.

Table 1403.4 SEPARATION VALUES

OCCUPANCY	CATEGORIES				
	a	b	c	d	e
A-1	0	0	0	0	1
A-2	-5	-3	0	1	3
R	-4	-2	0	2	4

A-3, A-4, B, E, F, M, S-1	-4	-3	0	2	4
S-2	-5	-2	0	2	4

1403.4.1 Categories. The categories for tenant and dwelling unit separations are:

1. Category a - No fire partitions; incomplete fire partitions; no doors; doors not self-closing or automatic-closing.

2. Category b - Fire partitions or floor assemblies with less than one-hour fire-resistance ratings or not constructed in accordance with Section 708 or 711 of the VCC, respectively.

3. Category c - Fire partitions with ~~1 hour~~ one-hour or greater fire-resistance ratings constructed in accordance with Section 708 of the VCC and floor assemblies with one-hour but less than two-hour fire-resistance ratings constructed in accordance with Section 711 of the VCC or with only one tenant within the floor area.

4. Category d - Fire barriers with one-hour but less than two-hour fire-resistance ratings constructed in accordance with Section 707 of the VCC and floor assemblies with two-hour or greater fire-resistance ratings constructed in accordance with Section 711 of the VCC.

5. Category e - Fire barriers and floor assemblies with two-hour or greater fire-resistance ratings and constructed in accordance with Sections 707 and 711 of the VCC, respectively.

1403.5 Corridor walls. Evaluate the fire-resistance rating and degree of completeness of walls ~~which~~ that create corridors serving the floor and that are constructed in accordance with Section 1020 of the VCC. This evaluation shall not include the wall elements considered under Sections 1403.3 and 1403.4. Under the categories and groups in Table 1403.5, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.5, Corridor Walls, for fire safety, means of egress, and general safety.

Table 1403.5 CORRIDOR WALL VALUES

OCCUPANCY	CATEGORIES			
	a	b	c[a]	d[a]
A-1	-10	-4	0	2
A-2	-30	-12	0	2
A-3, F, M, R, S-1	-7	-3	0	2
A-4, B, E, S-2	-5	-2	0	5

a. Corridors not providing at least one-half the exit access travel distance for all occupants on a floor shall use Category b.

1403.5.1 Categories. The categories for corridor walls are:

1. Category a - No fire partitions; incomplete fire partitions; no doors; or doors not self-closing.

2. Category b - Less than one-hour fire-resistance rating or not constructed in accordance with Section 708.4 of the VCC.

3. Category c - one-hour to less than ~~2 hour~~ two-hour fire-resistance rating, with doors conforming to Section 716 of the VCC or without corridors as permitted by Section 1020 of the VCC.

4. Category d - two-hour or greater fire-resistance rating, with doors conforming to Section 716 of the VCC.

1403.6 Vertical openings. Evaluate the fire-resistance rating of interior exit stairways or ramps, hoistways, escalator openings, and other shaft enclosures within the building~~,~~ and openings between two or more floors.

Table1403.6(1) contains the appropriate protection values. Multiply that value by the construction-type factor found in 1403.6(2). Enter the vertical opening value and its sign (positive or negative) in Table 1404.1 under Safety Parameter 1403.6, Vertical Openings, for fire safety, means of egress, and general safety. If the structure is a one-story building or if all the unenclosed vertical openings within the building conform to the requirements of Section 713 of the VCC, enter a value of two. The maximum positive value for this requirement shall be two.

Table 1403.6(1) VERTICAL OPENING PROTECTION VALUE

PROTECTION	VALUE
None (unprotected opening)	-2 times number of floors connected
Less than 1 hour	-1 times number of floors connected
1 to less than 2 hours	1
2 hours or more	2

TABLE 1403.6(2) CONSTRUCTION-TYPE FACTOR

FACTOR	TYPE OF CONSTRUCTION								
	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
	1.2	1.5	2.2	3.5	2.5	3.5	2.3	3.3	7

1403.6.1 Vertical opening formula. The following formula shall be used in computing vertical opening value.

$$VO = PV \times CF$$

(Equation 14-5)

VO = Vertical opening value.

PV = Protection value from Table 1403.6(1).

CF = Construction-type factor from Table 1403.6(2).

1403.7 HVAC systems. Evaluate the ability of the HVAC system to resist the movement of smoke and fire beyond the point of origin. Under the categories in Section 1403.7.1, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.7, HVAC Systems, for fire safety, means of egress, and general safety.

1403.7.1 Categories. The categories for HVAC systems are:

1. Category a - Plenums not in accordance with Section 602 of the International Mechanical Code. - 10 points.

2. Category b - Air movement in egress elements not in accordance with Section 1018.5 of the VCC. - 5 points.

3. Category c - Both Categories a and b are applicable. - 15 points.

4. Category d - Compliance of the HVAC system with Section ~~1020.5~~ 1020.6 of the VCC and Section 602 of the International Mechanical Code. - 0 points.

5. Category e - Systems serving one story; or a central boiler/chiller system without ductwork connecting two or more stories. - 5 points.

1403.8 Automatic fire detection. Evaluate the smoke detection capability based on the location and operation of automatic fire detectors in accordance with Section 907 of the VCC and Section 606 of the International Mechanical Code. Under the categories and occupancies in Table 1403.8, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.8, Automatic Fire Detection, for fire safety, means of egress, and general safety.

Table 1403.8 AUTOMATIC FIRE DETECTION VALUES

OCCUPANCY	CATEGORIES					
	a	b	c	d	e	f
A-1, A-3, F, M, R, S-1	-10	-5	0	2	6	-
A-2	-25	-5	0	5	9	-
A-4, B, E, S-2	-4	-2	0	4	8	-

1403.8.1 Categories. The categories for automatic fire detection are:

1. Category a - None.

2. Category b - Existing smoke detectors in HVAC systems.

3. Category c - Smoke detectors in HVAC systems. The detectors are installed in accordance with the requirements for new buildings in the International Mechanical Code.

4. Category d - Smoke detectors throughout all floor areas other than individual sleeping units, tenant spaces, and dwelling units.

5. Category e - Smoke detectors installed throughout the floor area.

6. Category f - Smoke detectors in corridors only.

1403.9 Fire alarm systems. Evaluate the capability of the fire alarm system in accordance with Section 907 of the VCC. Under the categories and occupancies in Table 1403.9, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.9, Fire Alarm System, for fire safety, means of egress, and general safety.

Table 1403.9 FIRE ALARM SYSTEM VALUES

OCCUPANCY	CATEGORIES			
	a	b[a]	c	d
A-1, A-2, A-3, A-4, B, E, R	-10	-5	0	5
F, M, S	0	5	10	15

a. For buildings equipped throughout with an automatic sprinkler system, add two points for activation by a sprinkler water-flow device.

1403.9.1 Categories. The categories for fire alarm systems are:

1. Category a - None.

2. Category b - Fire alarm system with manual fire alarm boxes in accordance with Section 907.4 of the VCC and alarm notification appliances in accordance with Section 907.5.2 of the VCC.

3. Category c - Fire alarm system in accordance with Section 907 of the VCC.

4. Category d - Category c plus a required emergency voice/alarm communications system and a fire command station that conforms to Section 911 of the VCC and contains the emergency voice/alarm communications system controls, fire department communication system controls, and any other controls specified in Section 911 of the VCC where those systems are provided.

1403.10 Smoke control. Evaluate the ability of a natural or mechanical venting, exhaust, or pressurization system to control the movement of smoke from a fire. Under the

categories and occupancies in Table 1403.10, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.10, Smoke Control, for means of egress and general safety.

Table 1403.10 SMOKE CONTROL VALUES

OCCUPANCY	CATEGORIES					
	a	b[a]	c	d	e	f
A-1, A-2, A-3	0	1	2	3	6	6
A-4, E	0	0	0	1	3	5
B, M, R	0	2a	3a	3a	3a	4a
F, S	0	2a	2s	3a	3a	3a

a. This value shall be zero if compliance with Category d or e in Section 1403.8.1 has not been obtained.

1403.10.1 Categories. The categories for smoke control are:

1. Category a - None.

2. Category b - The building is equipped throughout with an automatic sprinkler system. Openings are provided in exterior walls at the rate of 20 square feet (1.86 m^2) per 50 linear feet (15 240 mm) of exterior wall in each story and distributed around the building perimeter at intervals not exceeding 50 feet (15 240 mm). Such openings shall be readily openable from the inside without a key or separate tool and shall be provided with ready access thereto. In lieu of operable openings, clearly and permanently marked tempered glass panels shall be used.

3. Category c - One enclosed exit stairway, with ready access thereto, from each occupied floor of the building. The stairway has operable exterior windows, and the building has openings in accordance with Category b.

4. Category d - One smokeproof enclosure and the building has openings in accordance with Category b.

5. Category e - The building is equipped throughout with an automatic sprinkler system. Each floor area is provided with a mechanical airhandling system designed to accomplish smoke containment. Return and exhaust air shall be moved directly to the outside without recirculation to other floor areas of the building under fire conditions. The system shall exhaust not ~~less~~ fewer than six air changes per hour from the floor area. Supply air by mechanical means to the floor area is not required. Containment of smoke shall be considered as confining smoke to the floor area involved without migration to other floor areas. Any other tested and approved design that will adequately accomplish smoke containment is permitted.

6. Category f - Each stairway shall be one of the following: a smokeproof enclosure in accordance with Section 1023.11 of the VCC, pressurized in accordance with Section 909.20.5 of the VCC, or shall have operable exterior windows.

1403.11 Means of egress capacity and number. Evaluate the means of egress capacity and the number of exits available to the building occupants. In applying this section, the means of egress are required to conform to the following sections of the VCC: 1003.7, 1004, 1005, 1006, 1007, 1016.2, 1026.1, ~~1028.2,~~ 1028.3, 1028.5, ~~1029.2, 1029.3, 1029.4, and 1030~~ 1030.2, 1030.3, 1030.4, and 1031. The number of exits credited is the number that is available to each occupant of the area being evaluated. Existing fire escapes shall be accepted as a component in the means of egress when conforming to Section ~~405.~~ 303.

Under the categories and occupancies in Table 1403.11, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.11, Means of Egress Capacity, for means of egress and general safety.

Table 1403.11 MEANS OF EGRESS VALUES[a]

OCCUPANCY	CATEGORIES				
	a	b	c	d	e
A-1, A-2, A-3, A-4, E	-10	0	2	8	10
M	-3	0	1	2	4
B, F, S	-1	0	0	0	0
R	-3	0	0	0	0

a. The values indicated are for buildings six stories or less in height. For buildings over six stories above grade plane, add an additional -10 points.

1403.11.1 Categories. The categories for means-of-egress capacity and number of exits are:

1. Category a - Compliance with the minimum required means-of-egress capacity or number of exits is achieved through the use of a fire escape in accordance with Section 405.

2. Category b - Capacity of the means of egress complies with Section 1005 of the VCC, and the number of exits complies with the minimum number required by Section 1006 of the VCC.

3. Category c - Capacity of the means of egress is equal to or exceeds 125% of the required means-of-egress capacity, the means of egress complies with the minimum required width dimensions specified in the VCC, and the number of exits complies with the minimum number required by Section 1006 of the VCC.

4. Category d - The number of exits provided exceeds the number of exits required by Section 1006 of the VCC. Exits

shall be located a distance apart from each other equal to not less than that specified in Section 1007 of the VCC.

5. Category e - The area being evaluated meets both Categories c and d.

1403.12 Dead ends. In spaces required to be served by more than one means of egress, evaluate the length of the exit access travel path in which the building occupants are confined to a single path of travel. Under the categories and occupancies in Table 1403.12, determine the appropriate value and enter that value into 1404.1 under Safety Parameter 1403.12, Dead Ends, for means of egress and general safety.

Table 1403.12 DEAD-END VALUES

OCCUPANCY	CATEGORIES[a]			
	a	b	c	d
A-1, A-3, A-4, B, F, M, R, S	-2	0	2	-4
A-2, E	-2	0	2	-4

a. For dead-end distances between categories, the dead-end value shall be obtained by linear interpolation.

1403.12.1 Categories. The categories for dead ends are:

1. Category a - Dead end of 35 feet (10 670 mm) in nonsprinklered buildings or 70 feet (21 340 mm) in sprinklered buildings.

2. Category b - Dead end of 20 feet (6096 mm)~~,~~ or 50 feet (15 240 mm) in Group B in accordance with Section 1020.4, Exception 2, of the VCC.

3. Category c - No dead ends~~,~~ or ratio of length to width (l/w) is less than 2.5:1.4.

4. Category d - Dead ends exceeding Category a.

1403.13 Maximum exit access travel distance to an exit. Evaluate the length of exit access travel to an approved exit. Determine the appropriate points in accordance with the following equation and enter that value into Table 1404.1 under Safety Parameter 1403.13, Maximum Exit Access Travel Distance for means of egress and general safety. The maximum allowable exit access travel distance shall be determined in accordance with Section 1017.1 of the VCC.

EDITOR'S NOTE: Equation 14-6 is added as following:

$$\text{Points} = 20 \times \frac{\text{Maximum allowable travel distance} - \text{Maximum actual travel distance}}{\text{Maximum allowable travel distance}}$$

(Equation 14-6)

1403.14 Elevator control. Evaluate the passenger elevator equipment and controls that are available to the fire department to reach all occupied floors. Emergency recall and in-car operation of elevators shall be provided in accordance with the building code under which the building or the affected portion thereof was constructed or previously approved. Under the categories and occupancies in Table 1403.14, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.14, Elevator Control, for fire safety, means of egress and general safety. The values shall be zero for a single-story building.

Table 1403.14 ELEVATOR CONTROL VALUES

ELEVATOR TRAVEL	CATEGORIES			
	a	b	c	d
Less than 25 feet of travel above or below the primary level of elevator access for emergency fire-fighting or rescue personnel	-2	0	0	2
Travel of 25 feet or more above or below the primary level of elevator access for emergency fire-fighting or rescue personnel	-4	NP	0	4

For SI: 1 foot = 304.8 mm.
NP = Not permitted.

1403.14.1 Categories. The categories for elevator controls are:

1. Category a - No elevator.

2. Category b - Any elevator without Phase I emergency recall operation and Phase II emergency in-car operation.

3. Category c - All elevators with Phase I emergency recall operation and Phase II emergency in-car operation as required by the building code under which the building or the affected portion thereof was constructed or previously approved.

4. Category d - All meet Category c or Category b where permitted to be without Phase I emergency recall operation and Phase II emergency in-car operation, and ~~there is~~ at least one elevator that complies with new construction requirements serves all occupied floors.

1403.15 Means-of-egress emergency lighting. Evaluate the presence of and reliability of means-of-egress emergency lighting. Under the categories and occupancies in Table 1403.15, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.15, Means-of-Egress Emergency Lighting, for means of egress and general safety.

Table 1403.15 MEANS-OF-EGRESS EMERGENCY LIGHTING VALUES

NUMBER OF EXITS REQUIRED BY SECTION ~~1015~~ 1006 OF THE INTERNATIONAL BUILDING ~~BODE~~ CODE	CATEGORIES		
	a	b	c
Two or more exits	NP	0	4

Minimum of one exit	0	1	1
NP= Not permitted			

1403.15.1 Categories. The categories for means-of-egress emergency lighting are:

1. Category a - Means-of-egress lighting and exit signs not provided with emergency power in accordance with Section 2702 of the VCC.

2. Category b - Means-of-egress lighting and exit signs provided with emergency power in accordance with Section 2702 of the VCC.

3. Category c - Emergency power provided to means-of-egress lighting and exit signs, which provides protection in the event of power failure to the site or building.

1403.16 Mixed occupancies. Where a building has two or more occupancies that are not in the same occupancy classification, the separation between the mixed occupancies shall be evaluated in accordance with this section. Where there is no separation between the mixed occupancies or the separation between mixed occupancies does not qualify for any of the categories indicated in Section 1403.16.1, the building shall be evaluated as indicated in Section 1404.3.1, and the value for mixed occupancies shall be zero. Under the categories and occupancies in Table 1403.16, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.16, Mixed Occupancies, for fire safety and general safety. For buildings without mixed occupancies, the value shall be zero.

Table 1403.16 MIXED OCCUPANCY VALUES[a]

OCCUPANCY	CATEGORIES		
	a	b	c
A-1, A-2, R	-10	0	10
A-3, A-4, B, E, F, M, S	-5	0	5

a. For fire-resistance ratings between categories, the value shall be obtained by linear interpolation.

1403.16.1 Categories. The categories for mixed occupancies are:

1. Category a - Occupancies separated by minimum one-hour fire barriers ~~or~~, minimum one-hour horizontal assemblies, or both.

2. Category b - Separations between occupancies in accordance with Section 508.4 of the VCC.

3. Category c - Separations between occupancies having a fire-resistance rating of not less than twice that required by Section 508.4 of the VCC.

1403.17 Automatic sprinklers. Evaluate the ability to suppress a fire based on the installation of an automatic sprinkler system in accordance with Section 903.3.1.1 of the VCC. "Required sprinklers" shall be based on the requirements of this code. Under the categories and occupancies in Table 1403.17, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.17, Automatic Sprinklers, for fire safety, means of egress divided by two, and general safety. High-rise buildings defined in Chapter 2 of the VCC that undergo a change of occupancy to Group R shall be equipped throughout with an automatic sprinkler system in accordance with Section 403 of the VCC and Chapter 9 of the VCC.

Table 1403.17 SPRINKLER SYSTEM VALUES

OCCUPANCY	CATEGORIES					
	a[a]	b[a]	c	d	e	f
A-1, A-3, F, M, R, S-1	-6	-3	0	2	4	6
A-2	-4	-2	0	1	2	4
A-4, B, E, S-2	-12	-6	0	3	6	12

a. These options cannot be taken if Category a in Section 1403.18 is used.

1403.17.1 Categories. The categories for automatic sprinkler system protection are:

1. Category a - Sprinklers are required throughout; sprinkler protection is not provided or the sprinkler system design is not adequate for the hazard protected in accordance with Section 903 of the VCC.

2. Category b - Sprinklers are required in a portion of the building; sprinkler protection is not provided or the sprinkler system design is not adequate for the hazard protected in accordance with Section 903 of the VCC.

3. Category c - Sprinklers are not required; none are provided.

4. Category d - Sprinklers are required in a portion of the building; sprinklers are provided in such portion; the system is one that complied with the code at the time of installation and is maintained and supervised in accordance with Section 903 of the VCC.

5. Category e - Sprinklers are required throughout; sprinklers are provided throughout in accordance with Chapter 9 of the VCC.

6. Category f - Sprinklers are not required throughout; sprinklers are provided throughout in accordance with Chapter 9 of the VCC.

1403.18 Standpipes. Evaluate the ability to initiate attack on a fire by a making supply of water available readily through the installation of standpipes in accordance with Section 905 of the VCC. "Required Standpipes" shall be based on the requirements of the VCC. Under the categories and occupancies in Table 1403.18, determine the appropriate value and enter that value into Table 1404.1 under Safety Parameter 1403.18, Standpipes, for fire safety, means of egress, and general safety.

Table 1403.18 STANDPIPE SYSTEM VALUES

OCCUPANCY	CATEGORIES			
	a[a]	b	c	d
A-1, A-3, F, M, R, S-1	-6	0	4	6
A-2	-4	0	2	4
A-4, B, E, S-2	-12	0	6	12

1403.18.1 Standpipe categories. The categories for standpipe systems are:

1. Category a - Standpipes are required; standpipe is not provided or the standpipe system design is not in compliance with Section 905.3 of the VCC.

2. Category b - Standpipes are not required; none are provided.

3. Category c - Standpipes are required; standpipes are provided in accordance with Section 905 of the VCC.

4. Category d - Standpipes are not required; standpipes are provided in accordance with Section 905 of the VCC.

1403.19 Incidental uses. Evaluate the protection of incidental uses in accordance with Section 509.4.2 of the VCC. Do not include those where this code requires automatic sprinkler systems throughout the building, including covered and open mall buildings, high-rise buildings, public garages, and ~~unlimited area~~ unlimited-area buildings. Assign the lowest score from Table 1403.19 for the building or floor area being evaluated and enter that value into Table 1404.1 under Safety Parameter 1403.19, Incidental Uses, for fire safety, means of egress and general safety. If there are no specific occupancy areas in the building or floor area being evaluated, the value shall be zero.

Table 1403.19 INCIDENTAL USE AREA VALUES

PROTECTION REQUIRED BY TABLE 509 OF THE VCC	PROTECTION PROVIDED						
	None	1 hour	AS	AS with CRS	1 hour and AS	2 hours	2 hours and AS
2 hours and AS	-4	-3	-2	-2	-1	-2	0
2 hours, or 1 hour and AS	-3	-2	-1	-1	0	0	0
1 hour and AS	-3	-2	-1	-1	0	-1	0
1 hour	-1	0	-1	-1	0	0	0
1 hour, or AS with CRS	-1	0	-1	-1	0	0	0
AS with CRS	-1	-1	-1	-1	0	-1	0
1 hour or AS	-1	0	0	0	0	0	0

AS = Automatic sprinkler system;

CRS - Construction capable of resisting the passage of smoke (see Section 509.4.2 of the VCC).

~~1403.20 Smoke compartmentation. Evaluate the smoke compartments for compliance with Section 407.5 of the VCC. Under the categories and occupancies in Table 1403.20, determine the appropriate smoke compartmentation value (SCV) and enter that value into Table 1404.1 under Safety Parameter 1403.20, Smoke Compartmentation, for fire safety, means of egress and general safety.~~

~~TABLE 1403.20 SMOKE COMPARTMENT VALUES~~

~~OCCUPANCY~~	~~CATEGORIES[a]~~		
	~~a~~	~~b~~	~~c~~
~~A, B, E, F, M, R and S~~	~~0~~	~~0~~	~~0~~

~~For SI: 1 square foot = 0.093 m²~~

~~NP = Not permitted~~

~~a. For areas between categories, the smoke compartmentation value shall be obtained by linear interpolation.~~

~~1403.20.1 Categories. Categories for smoke compartment size are:~~

~~Category a – Smoke compartment size equal to or less than 22,500 square feet (2092 m²).~~

~~Category b – Smoke compartment size is greater than 22,500 square feet (2092 m²).~~

~~Category c – Smoke compartments are not provided.~~

Section 1404 Evaluation Scores

1404.1 Building Score. After determining the appropriate data from Section 1403, enter those data in Table ~~1404.2~~ 1404.1 and total the building score.

TABLE 1404.1 SUMMARY SHEET-BUILDING CODE					
Existing occupancy _____			Proposed Occupancy _____		
Year building was constructed _____			Number of stories_____ Height in feet _____		
Type of construction _____			Area per floor _____		
Percentage of open perimeter increase _____%					
Completely suppressed:	Yes____	No____	Corridor wall rating_____		
			Type: _____		
Fire-resistance rating of vertical opening enclosures _____					
Type of HVAC system _____, serving number of floors _____					
Automatic fire detection:	Yes____	No____	Type and Location: _____		
Fire alarm system:	Yes____	No____	Type: _____		
Smoke control:	Yes____	No____	Type: _____		
Adequate exit ~~route~~ routes:	Yes____	No____	Dead ends: _____	Yes___	No____
Maximum exist access travel distance _____			Elevator controls:	Yes____	No____
Means of egress emergency lighting:	Yes____	No____	Mixed occupancies:	Yes____	No____
Standpipes	Yes____	No____	Patient ability for self-preservation _____		
Incidental use	Yes____	No____	Patient concentration _____		
Smoke compartmentation less than 22,500 sq. feet (2092 m^2)	Yes____	No____	Attendant-to-patient ratio _____		

SAFETY PARAMETERS	FIRE SAFETY (FS)	MEANS OF EGRESS (ME)	GENERAL SAFETY (GS)
1403.1 Building Height			
1403.2 Building Area			
1403.3 Compartmentation			
1403.4 Tenant and Dwelling Unit Separations			
1403.5 Corridor Walls			
1403.6 Vertical Openings			
1403.7 HVAC Systems			
1403.8 Automatic Fire Detection			
1403.9 Fire Alarm System			
1403.10 Smoke Control	****		
1403.11 Means of Egress	****		
1403.12 Dead Ends	****		
1403.13 Maximum Exit Access Travel Distance	****		
1403.14 Elevator Control			
1403.15 Means of Egress Emergency Lighting	****		
1403.16 Mixed Occupancies		****	
1403.17 Automatic Sprinklers		÷ 2 =	
1403.18 Standpipes			
1403.19 Incidental Use			
1403.20 Smoke Compartmentation			
Building score - total value			

****No applicable value to be inserted.

1404.2 Safety scores. The values in Table 1404.2 are the required mandatory safety scores for the evaluation process listed in Section 1403.

TABLE 1404.2 MANDATORY SAFETY SCORES[a]

OCCUPANCY	FIRE SAFETY (MFS)	MEANS OF EGRESS (MME)	GENERAL SAFETY (MGS)
A-1	20	31	31
A-2	21	32	32
A-3	22	33	33
A-4, E	29	40	40
B	30	40	40
F	24	34	34
M	23	40	40
R	21	38	38
S-1	19	29	29
S-2	29	39	39

a. MFS = Mandatory Fire Safety,
MME = Mandatory Means of Egress,
MGS = Mandatory General Safety

1404.3 Final scores. The mandatory safety score in Table 1404.2 shall be subtracted from the building score in Table ~~1404.2~~ 1404.1 for each category. Where the final score for any category equals zero or more, the building is in compliance with the requirements of this section for that category. Where the final score for any category is less than zero, the building is not in compliance with the requirements of this section.

1404.3.1 Mixed occupancies. For mixed occupancies, the following provisions shall apply:

1. Where the separation between mixed occupancies does not qualify for any category indicated in Section 1403.16, the mandatory safety scores for the occupancy with the lowest general safety score in Table 1404.2 shall be utilized. (See Section 1404.3.1).

2. Where the separation between mixed occupancies qualifies for any category indicated in Section 1403.16, the mandatory safety scores for each occupancy shall be placed against the evaluation scores for the appropriate occupancy.

TABLE 1404.3 FINAL SCORES[a]

FORMULA	~~T1401.7~~ T1404.1	~~T1401.8~~ T1404.2		SCORE	PASS	FAIL
FS - MFS ≥ 0	_____ (FS) -	_____ (MFS)	=	_____	_____	_____
ME - MME ≥ 0	_____ (ME) -	_____ (MME)	=	_____	_____	_____
GS - MGS ≥ 0	_____ (GS) -	_____ (MGS)	=	_____	_____	_____

a. ~~FE~~ FS = Fire Safety
MFS = Mandatory Fire Safety~~,~~.
ME = Means of Egress.
MME = Mandatory Means of Egress~~,~~.
GS = General Safety.
MGS = Mandatory General Safety.

13VAC5-63-450. Chapter 1 Administration; Section 101 General.

A. Section 101.1 Short title. The Virginia Uniform Statewide Building Code, Part III, the Virginia Maintenance Code, may be cited as the "Virginia Property Maintenance Code," or ~~as the "VMC."~~ the short title of "VPMC."

B. Section 101.2 Incorporation by reference. Chapters 2 through 8 of the ~~2018~~ 2021 International Property Maintenance Code, published by the International Code Council, Inc., are adopted and incorporated by reference to be an enforceable part of the VMC. The term "IPMC" means the ~~2018~~ 2021 International Property Maintenance Code, published by the International Code Council, Inc. Any codes and standards referenced in the IPMC are also considered to be part of the incorporation by reference, except that such codes and standards are used only to the prescribed extent of each such reference.

C. Section 101.3 Numbering system. A dual numbering system is used in the VMC to correlate the numbering system of the Virginia Administrative Code with the numbering system of the IPMC. IPMC numbering system designations are provided in the catchlines of the Virginia Administrative Code sections and cross references between sections or chapters of

the Virginia Maintenance Code use only the IPMC numbering system designations. The term "chapter" is used in the context of the numbering system of the IPMC and may mean a chapter in the VMC, a chapter in the IPMC, or a chapter in a referenced code or standard, depending on the context of the use of the term. The term "chapter" is not used to designate a chapter of the Virginia Administrative Code, unless clearly indicated.

D. Section 101.4 Arrangement of code provisions. The VMC is comprised of the combination of (i) the provisions of Chapter 1, Administration, which are established herein, (ii) Chapters 2 - through 8 of the IPMC, which are incorporated by reference in Section 101.2, and (iii) the changes to the text of the incorporated chapters of the IPMC which are specifically identified. The terminology "changes to the text of the incorporated chapters of the IPMC which are specifically identified" shall also be referred to as the "state amendments to the IPMC." Such state amendments to the IPMC are set out using corresponding chapter and section numbers of the IPMC numbering system.

E. Section 101.5 Use of terminology and notes. The term "this code," or "the code," where used in the provisions of Chapter 1, in Chapters 2 - through 8 of the IPMC, or in the state amendments to the IPMC, means the VMC, unless the context clearly indicates otherwise. The term "this code," or "the code," where used in a code or standard referenced in the IPMC, means that code or standard, unless the context clearly indicates otherwise. The term "USBC" where used in this code means the VCC unless the context clearly indicates otherwise. In addition, the use of notes in Chapter 1 is to provide information only and shall not be construed as changing the meaning of any code provision. Notes in the IPMC, in the codes and standards referenced in the IPMC, and in the state amendments to the IPMC, may modify the content of a related provision and shall be considered to be a valid part of the provision, unless the context clearly indicates otherwise.

F. Section 101.6 Order of precedence. The provisions of this code shall be used as follows:

1. The provisions of Chapter 1 of this code supersede any provisions of Chapters 2 - through 8 of the IPMC that address the same subject matter and impose differing requirements.

2. The provisions of Chapter 1 of this code supersede any provisions of the codes and standards referenced in the IPMC that address the same subject matter and impose differing requirements.

3. The state amendments to the IPMC supersede any provisions of Chapters 2 - through 8 of the IPMC that address the same subject matter and impose differing requirements.

4. The state amendments to the IPMC supersede any provisions of the codes and standards referenced in the IPMC that address the same subject matter and impose differing requirements.

5. The provisions of Chapters 2 - through 8 of the IPMC supersede any provisions of the codes and standards referenced in the IPMC that address the same subject matter and impose differing requirements.

G. Section 101.7 Definitions. The definitions of terms used in this code are contained in Chapter 2 along with specific provisions addressing the use of definitions. Terms may be defined in other chapters or provisions of the code and such definitions are also valid.

13VAC5-63-470. Section 103 Application of code.

A. Section 103.1 General. This code prescribes regulations for the maintenance of all existing buildings and structures and associated equipment, including regulations for unsafe buildings and structures.

B. Section 103.2 Maintenance requirements. Buildings, structures, and systems shall be maintained and kept in good repair in accordance with the requirements of this code and when applicable in accordance with the USBC under which such building or structure was constructed. No provision of this code shall require alterations to be made to an existing building or structure or to equipment unless conditions are present which meet the definition of an unsafe structure ~~or a structure unfit for human occupancy~~.

C. 103.2.1 Maintenance of nonrequired components and systems. Nonrequired components and systems may be discontinued in use provided that no hazard results from such discontinuance of use.

D. 103.2.2 Maintenance of nonrequired fire protection systems. Nonrequired fire protection systems shall be maintained to function as originally installed. If any such systems are to be reduced in function or discontinued, approval shall be obtained from the building official in accordance with Section 103.3.1 of the VCC.

E. 103.2.3 Responsibility. The owner of a structure shall provide and maintain all buildings, structures, systems, facilities, and associated equipment in compliance with this code unless it is specifically expressed or implied that it is the responsibility of the tenant or occupant.

Note: Where an owner states that a tenant is responsible for performing any of the owner's duties under this code, the code official may request information needed to verify the owner's statement, as allowed by § ~~55-1-1209~~ 55.1-1209 A 5 of the Code of Virginia. A tenant's responsibility is limited and protected under the Virginia Residential Landlord and Tenant Act.

F. Section 103.3 Continued approval. Notwithstanding any provision of this code to the contrary, alterations shall not be required to be made to existing buildings or structures which

are occupied in accordance with a certificate of occupancy issued under any edition of the USBC.

G. Section 103.4 Rental Inspections. In accordance with § 36-105.1:1 of the Code of Virginia, these provisions are applicable to rental inspection programs. For purposes of this section:

"Dwelling unit" means a building or structure or part thereof that is used for a home or residence by one or more persons who maintain a household.

"Owner" means the person shown on the current real estate assessment books or current real estate assessment records.

"Residential rental dwelling unit" means a dwelling unit that is leased or rented to one or more tenants. However, a dwelling unit occupied in part by the owner thereof shall not be construed to be a residential rental dwelling unit unless a tenant occupies a part of the dwelling unit that has its own cooking and sleeping areas~~,~~ and a bathroom, unless otherwise provided in the zoning ordinance by the local governing body.

The local governing body may adopt an ordinance to inspect residential rental dwelling units for compliance with this code and to promote safe, decent, and sanitary housing for its citizens, in accordance with the following:

1. Except as provided for in subdivision 3 of this subsection, the dwelling units shall be located in a rental inspection district established by the local governing body in accordance with this section; and

2. The rental inspection district is based upon a finding by the local governing body that (i) there is a need to protect the public health, safety, and welfare of the occupants of dwelling units inside the designated rental inspection district; (ii) the residential rental dwelling units within the designated rental inspection district are either (a) blighted or in the process of deteriorating or (b) the residential rental dwelling units are in the need of inspection by the building department to prevent deterioration, taking into account the number, age, and condition of residential dwelling rental units inside the proposed rental inspection district; and (iii) the inspection of residential rental dwelling units inside the proposed rental inspection district is necessary to maintain safe, decent, and sanitary living conditions for tenants and other residents living in the proposed rental inspection district. Nothing in this section shall be construed to authorize one or more locality-wide rental inspection districts, and a local governing body shall limit the boundaries of the proposed rental inspection districts to such areas of the locality that meet the criteria set out in this subsection; or

3. An individual residential rental dwelling unit outside of a designated rental inspection district is made subject to the rental inspection ordinance based upon a separate finding for each individual dwelling unit by the local governing body that (i) there is a need to protect the public health, welfare, and safety of the occupants of that individual dwelling unit; (ii) the individual dwelling unit is either (a) blighted or (b) in the process of deteriorating; or (iii) there is evidence of violations of this code that affect the safe, decent, and sanitary living conditions for tenants living in such individual dwelling unit.

For purposes of this section, the local governing body may designate a local government agency other than the building department to perform all or part of the duties contained in the enforcement authority granted to the building department by this section.

Before adopting a rental inspection ordinance and establishing a rental inspection district or an amendment to either, the governing body of the locality shall hold a public hearing on the proposed ordinance. Notice of the hearing shall be published once a week for two successive weeks in a newspaper published or having general circulation in the locality.

Upon adoption by the local governing body of a rental inspection ordinance, the building department shall make reasonable efforts to notify owners of residential rental dwelling units in the designated rental inspection district~~,~~ or ~~their~~ an owner's designated managing agents~~,~~ and to any individual dwelling units subject to the rental inspection ordinance~~,~~ not located in a rental inspection ~~district,~~ of the adoption of such ordinance~~,~~ and provide information and an explanation of the rental inspection ordinance and the responsibilities of the owner thereunder.

The rental inspection ordinance may include a provision that requires the owners of dwelling units in a rental inspection district to notify the building department in writing if the dwelling unit of the owner is used for residential rental purposes. The building department may develop a form for such purposes. The rental inspection ordinance shall not include a registration requirement or a fee of any kind associated with the written notification pursuant to this subdivision. A rental inspection ordinance may not require that the written notification from the owner of a dwelling unit subject to a rental inspection ordinance be provided to the building department in less than 60 days after the adoption of a rental inspection ordinance. However, there shall be no penalty for the failure of an owner of a residential rental dwelling unit to comply with the provisions of this subsection, unless and until the building department provides personal or written notice to the property owner, as provided in this section. In any event, the sole penalty for the willful failure of an owner of a dwelling unit who is using the dwelling unit for residential rental purposes to comply with the written notification requirement shall be a civil penalty of up to $50. For purposes of this subsection, notice sent by regular first-class mail to the last known address of the owner as shown on the current real estate tax assessment books or current real

estate tax assessment records shall be deemed compliance with this requirement.

Upon establishment of a rental inspection district in accordance with this section, the building department may, in conjunction with the written notifications as provided for ~~above~~ in this section, proceed to inspect dwelling units in the designated rental inspection district to determine if the dwelling units are being used as a residential rental property and for compliance with the provisions of this code that affect the safe, decent, and sanitary living conditions for the tenants of such property.

If a multifamily development has more than 10 dwelling units, in the initial and periodic inspections, the building department shall inspect only a sampling of dwelling units, of not less than two and not more than 10% of the dwelling units, of a multifamily development, that includes all of the multifamily buildings that are part of that multifamily development. In no event, however, shall the building department charge a fee authorized by this section for inspection of more than 10 dwelling units. If the building department determines upon inspection of the sampling of dwelling units that there are violations of this code that affect the safe, decent, and sanitary living conditions for the tenants of such multifamily development, the building department may inspect as many dwelling units as necessary to enforce these provisions, in which case, the fee shall be based upon a charge per dwelling unit inspected, as otherwise provided in the fee schedule established pursuant to this section.

Upon the initial or periodic inspection of a residential rental dwelling unit subject to a rental inspection ordinance, the building department has the authority under these provisions to require the owner of the dwelling unit to submit to such follow-up inspections of the dwelling unit as the building department deems necessary, until such time as the dwelling unit is brought into compliance with the provisions of this code that affect the safe, decent, and sanitary living conditions for the tenants.

Except as provided for ~~above~~ in this section, following the initial inspection of a residential rental dwelling unit subject to a rental inspection ordinance, the building department may inspect any residential rental dwelling unit in a rental inspection district, that is not otherwise exempted in accordance with this section, no more than once each calendar year.

Upon the initial or periodic inspection of a residential rental dwelling unit subject to a rental inspection ordinance for compliance with these provisions, provided that there are no violations of this code that affect the safe, decent, and sanitary living conditions for the tenants of such residential rental dwelling unit, the building department shall provide, to the owner of such residential rental dwelling unit, an exemption from the rental inspection ordinance for a minimum of four years. Upon the sale of a residential rental dwelling unit, the building department may perform a periodic inspection as provided ~~above~~ in this section, subsequent to such sale. If a residential rental dwelling unit has been issued a certificate of occupancy within the last four years, an exemption shall be granted for a minimum period of four years from the date of the issuance of the certificate of occupancy by the building department. If the residential rental dwelling unit becomes in violation of this code during the exemption period, the building department may revoke the exemption previously granted under this section.

A local governing body may establish a fee schedule for enforcement of these provisions~~, which~~ that includes a per dwelling unit fee for the initial inspections, follow-up inspections, and periodic inspections under this section.

The provisions of this section shall not in any way alter the rights and obligations of landlords and tenants pursuant to the applicable provisions of Chapter ~~13 (§ 55-217 et seq.) or Chapter 13.2 (§ 55-248.2 et seq.) of Title 55~~ 12 (§ 55.1-1200 et seq.) of Title 55.1 of the Code of Virginia.

The provisions of this section shall not alter the duties or responsibilities of the local building department under § 36-105 of the Code of Virginia to enforce the USBC.

Unless otherwise provided for in § 36-105.1:1 of the Code of Virginia, penalties for violation of this section shall be the same as the penalties provided for violations of other sections of the USBC.

13VAC5-63-485. Section 105 Violations.

105.1 Violation a misdemeanor; civil penalty. In accordance with § 36-106 of the Code of Virginia, it shall be unlawful for any owner or any other person, firm, or corporation, on or after the effective date of any code provisions, to violate any such provisions. Any locality may adopt an ordinance that establishes a uniform schedule of civil penalties for violations of specified provisions of the code that are not abated or remedied promptly after receipt of a notice of violation from the local enforcement officer.

Note: See the full text of § 36-106 of the Code of Virginia for additional requirements and criteria pertaining to legal action relative to violations of the code.

105.2 Notices, reports and orders. Upon findings by the code official that violations of this code exist, the code official shall issue a correction notice or notice of violation to the owner, tenant or the person responsible for the maintenance of the structure or a notice of unsafe structure in accordance with Section 106 when a building or structure is determined by the code official to be an unsafe structure. Work done to correct violations of this code subject to the permit, inspection, and approval provisions of the VCC shall not be construed as authorization to extend the time limits established for compliance with this code. When the owner is not the responsible party to whom the notice of violation or correction

notice is issued, a copy of the notice shall also be delivered to the owner.

105.3 Correction notice. The correction notice shall be a written notice of the defective conditions. The correction notice shall require correction of the violation within a reasonable time unless an emergency condition exists as provided under the unsafe building provisions of Section 106. Upon request, the correction notice shall reference the code section that serves as the basis for the defects and shall state that such defects shall be corrected and reinspected in a reasonable time designated by the code official.

105.4 Notice of violation. If the code official determines there are violations of this code a written notice of violation may be issued to the owner, tenant, or the person responsible for the maintenance or use of the building or structure in lieu of a correction notice as provided for in Section 105.3. In addition, the code official shall issue a notice of violation for any uncorrected violation remaining from a correction notice established in Section 105.3. The code official shall provide the section numbers for any code provisions cited in the notice of violation to the owner, tenant, or the person responsible for the maintenance or use of the building or structure. The notice shall require correction of the violation within a reasonable time. The owner, tenant, or person to whom the notice of violation has been issued shall be responsible for contacting the code official within the timeframe established for any reinspections to assure the violations have been corrected. The code official will be responsible for making such inspection and verifying the violations have been corrected. In addition, the notice of violation shall indicate the right of appeal by referencing the appeals section of this code.

~~Exceptions:~~ Exception:

~~1. Notices issued and legal proceedings or emergency actions taken under Section 106 for unsafe structures, unsafe equipment, or structures unfit for human occupancy.~~

~~2.~~ Notices issued for failing to maintain buildings and structures as required by Section 103.2, as evidenced by multiple or repeated violations on the same property are not required to include a compliance deadline for correcting defects.

105.5 Coordination of inspections. The code official shall coordinate inspections and administrative orders with any other state or local agencies having related inspection authority and shall coordinate those inspections required by the Virginia Statewide Fire Prevention Code ~~(13VAC5-51)~~ (13VAC5-52) for maintenance of fire protection devices, equipment, and assemblies so that the owners and occupants will not be subjected to numerous inspections or conflicting orders.

Note: The Fire Prevention Code requires the fire official to coordinate such inspections with the code official.

105.6 Further action when violation not corrected. If the responsible party has not complied with the notice of violation, or notice of unsafe structure, the code official may request the legal counsel of the locality to institute the appropriate legal proceedings to restrain, correct or abate the violation or to require the removal or termination of the use of the building or structure involved. In cases where the locality or legal counsel so authorizes, the code official may issue or obtain a summons or warrant.

105.6.1 Further action for corrected violations: Compliance with a notice of violation or notice of unsafe structure notwithstanding, the code official may request legal proceedings be instituted for prosecution when a responsible party is served with three or more separate notices of violation or notice of unsafe structure for the same property within any five consecutive years. Legal proceedings shall not be instituted under this section for violation notices issued pursuant to the initial inspection of the property. Legal proceedings for violations that have been abated in residential rental dwelling units within a multifamily apartment development may only be instituted for such violations that affect safe, decent, or sanitary living conditions.

Exception: Legal proceedings shall not be instituted for violations that have been abated on owner-occupied single family dwellings.

105.7 Penalties and abatement. Penalties for violations of this code shall be as set out in § 36-106 of the Code of Virginia. The successful prosecution of a violation of the code shall not preclude the institution of appropriate legal action to require correction or abatement of a violation.

13VAC5-63-490. Section 106 Unsafe structures ~~or structures unfit for human occupancy~~.

A. Section 106.1 General. This section shall apply to existing structures which are classified as unsafe ~~or unfit for human occupancy~~. All conditions causing such structures to be classified as unsafe ~~or unfit for human occupancy~~ shall be remedied or as an alternative to correcting such conditions, the structure may be vacated and secured against public entry or razed and removed. Vacant and secured structures shall still be subject to other applicable requirements of this code. ~~Notwithstanding the above, when~~ When the code official determines that an unsafe structure ~~or a structure unfit for human occupancy~~ constitutes such a hazard that it should be ~~razed or removed~~ demolished, then the code official shall be permitted to order the demolition of such structures in accordance with applicable requirements of this code.

Note: Structures which become unsafe during construction are regulated under the VCC.

~~B. Section 106.2 Inspection of unsafe or unfit structures. The code official shall inspect any structure reported or discovered as unsafe or unfit for human habitation and shall prepare a report to be filed in the records of the local enforcing agency~~

~~and a copy issued to the owner. The report shall include the use of the structure and a description of the nature and extent of any conditions found.~~

~~C.~~ B. Section 106.3 Notice of unsafe structure ~~or structure unfit for human occupancy~~. When a structure is determined ~~to be unsafe or unfit for human occupancy~~ by the code official to be an unsafe structure, a written notice of unsafe structure ~~or structure unfit for human occupancy~~ shall be issued by personal service to the owner, the owner's agent, or the person in control of such structure. If the notice is unable to be issued by personal service, then the notice shall be sent by registered or certified mail to the last known address of the responsible party, and a copy of the notice shall be posted in a conspicuous place on the premises. The notice shall specify the section numbers for any code provisions cited, the corrections necessary to comply with this code, or if the structure is required to be demolished, the notice shall specify the time period within which the demolition must occur. ~~Requirements in Section 105.2 for notices of violation are also applicable to notices issued under this section to the extent that any such requirements are not in conflict with the requirements of this section.~~ The notice of unsafe structure shall indicate the right of appeal by referencing the appeals section of this code. The person to whom the notice has been issued shall be responsible for contacting the code official within the timeframe established for any reinspections to ensure the violations have been corrected. The code official will be responsible for making such inspection and verifying the violations have been corrected.

Note: Whenever possible, the notice should also be given to any tenants of the affected structure.

~~D.~~ C. Section ~~106.3.1~~ 106.4 Vacating unsafe structure. ~~If the~~ The code official ~~determines there~~ is ~~actual and immediate danger to the occupants or public, or when life is endangered by the occupancy of an unsafe structure, the code official shall be~~ authorized to order ~~the~~ occupants to ~~immediately~~ vacate the unsafe structure or prohibit occupancy of the unsafe structure. When an unsafe structure is ordered to be vacated or prohibited from occupancy, the code official shall ~~post a notice with the following wording at each entrance: "THIS STRUCTURE IS UNSAFE AND ITS OCCUPANCY (OR USE) IS PROHIBITED BY THE CODE OFFICIAL." After posting, occupancy or use of the unsafe structure shall be prohibited except when authorized to enter to conduct inspections, make required repairs or as necessary to demolish the structure~~ include the order in the notice of unsafe structure, or issue a separate order.

~~E. Section 106.4 Posting of notice. If the notice is unable to be issued by personal service as required by Section 106.3, then the notice shall be sent by registered or certified mail to the last known address of the responsible party and a copy of the notice shall be posted in a conspicuous place on the premises.~~

~~F.~~ D. Section 106.5 Posting of placard. ~~In the case of a structure unfit for human habitation, at the time the notice is issued, a placard~~ An unsafe structure that has been issued an order to vacate or prohibited from occupancy shall be posted with the following wording ~~shall be posted~~ at ~~the~~ each entrance to the structure: "THIS STRUCTURE IS ~~UNFIT FOR HABITATION~~ UNSAFE AND ITS USE OR OCCUPANCY HAS BEEN PROHIBITED BY THE CODE OFFICIAL." ~~In the case of an unsafe structure, if the notice is not complied with, a placard with the above wording shall be posted at the entrance to the structure.~~ After a structure is placarded, entering the structure shall be prohibited except as authorized by the code official to make inspections, to perform required repairs, or to demolish the structure. In addition, the placard shall not be removed until the structure is determined by the code official to be safe to occupy, nor shall the placard be defaced.

~~G.~~ E. Section 106.6 Revocation of certificate of occupancy. If a notice of unsafe structure ~~or structure unfit for human habitation~~ is not complied with within the time period stipulated on the notice, the code official shall be permitted to request the local building department to revoke the certificate of occupancy issued under the VCC.

~~H.~~ F. Section 106.7 Vacant and open structures. When an unsafe structure ~~or a structure unfit for human habitation~~ is open for public entry ~~at the time a placard is issued under Section 106.5~~, the code official shall be permitted to authorize the necessary work to make such structure secure against public entry whether or not legal action to compel compliance has been instituted.

~~I.~~ G. Section 106.8 Emergency repairs and demolition. To the extent permitted by the locality, the code official may authorize emergency repairs to unsafe structures ~~or structures unfit for human habitation~~ when it is determined that there is an imminent danger of any portion of the unsafe structure ~~or structure unfit for human habitation~~ collapsing or falling and when life is endangered. Emergency repairs may also be authorized where there is a code violation resulting in the immediate serious and imminent threat to the life and safety of the occupants. The code official shall be permitted to authorize the necessary work to make the structure temporarily safe whether or not legal action to compel compliance has been instituted. In addition, whenever an owner of an unsafe structure ~~or structure unfit for human habitation~~ fails to comply with a notice to demolish issued under Section 106.3 in the time period stipulated, the code official shall be permitted to cause the structure to be demolished. In accordance with §§ 15.2-906 and 15.2-1115 of the Code of Virginia, the legal counsel of the locality may be requested to institute appropriate action against the property owner to recover the costs associated with any such emergency repairs or demolition and every such charge that remains unpaid shall constitute a lien against the property on which the emergency repairs or demolition were made and shall be enforceable in the same

manner as provided in Articles 3 (§ 58.1-3940 et seq.) and 4 (§ 58.1-3965 et seq.) of Chapter 39 of Title 58.1 of the Code of Virginia.

Note: Code officials and local governing bodies should be aware that other statutes and court decisions may impact on matters relating to demolition, in particular whether newspaper publication is required if the owner cannot be located and whether the demolition order must be delayed until the owner has been given the opportunity for a hearing. In addition, historic building demolition may be prevented by authority granted to local historic review boards in accordance with § 15.2-2306 of the Code of Virginia unless determined necessary by the code official.

J. Section 106.9 Closing of streets. When necessary for public safety, the code official shall be permitted to order the temporary closing of sidewalks, streets, public ways, or premises adjacent to unsafe ~~or unfit~~ structures and prohibit the use of such spaces.

13VAC5-63-510. Chapter 2 Definitions.

A. Change Section 201.3 of the IPMC to read:

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the IBC, IFC, IFGC, IPC, IMC, International Existing Building Code, IRC, International Zoning Code, or NFPA 70, such terms shall have the meanings ascribed to them as stated in those codes, except that terms defined in the VCC shall be used for this code and shall take precedence over other definitions.

~~B. Change Section 201.5 of the IPMC to read:~~

~~201.5 Parts. Whenever the words "dwelling unit," "dwelling," "premises," "building," "rooming unit," "housekeeping unit," or "story" are stated in this code, they shall be construed as though they were followed by the words "or part thereof."~~

~~C.~~ B. Add the following definitions to Section 202 of the IPMC to read:

Applicable building code. The local or statewide building code and referenced standards in effect at the time the building or portion thereof was constructed, altered, renovated, or underwent a change of occupancy. See Section 103 for the application of the code.

Maintained. To keep unimpaired in an appropriate condition, operation, and continuance as installed in accordance with the applicable building code, or as previously approved, and in accordance with the applicable operational and maintenance provisions of this code.

~~Structure unfit for human occupancy. An existing structure determined by the code official to be dangerous to the health, safety and welfare of the occupants of the structure or the public because (i) of the degree to which the structure is in disrepair or lacks maintenance, ventilation, illumination, sanitary or heating facilities or other essential equipment, or (ii) the required plumbing and sanitary facilities are inoperable.~~

Unsafe equipment. Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers, or other equipment that is in such disrepair or condition that such equipment is determined by the code official to be dangerous to the health, safety, and welfare of the occupants of a structure or the public.

Unsafe structure. An existing structure ~~(i)~~ determined by the code official to be dangerous to the health, safety, and welfare of the occupants of the structure or the public~~, (ii) that contains unsafe equipment, or (iii) that is so damaged, decayed, dilapidated, structurally unsafe or of such faulty construction or unstable foundation that partial or complete collapse is likely. A vacant existing structure unsecured or open shall be deemed to be an unsafe structure~~ because of but not limited to any of the following conditions:

1. The structure contains unsafe equipment;

2. The structure is so damaged, decayed, dilapidated, structurally unsafe, or of such faulty construction or unstable foundation that partial or complete collapse is likely;

3. The structure is unsecured or open;

4. The degree to which the structure is in disrepair or lacks maintenance, ventilation, illumination, sanitary or heating facilities, or other essential equipment;

5. The required plumbing and sanitary facilities are inoperable.

~~D.~~ C. Change the following definition in Section 202 of the IPMC to read:

Infestation. The presence of insects, rodents, vermin, or other pests in sufficient number to adversely affect the structure or health, safety, and welfare of the occupants.

~~E.~~ D. Delete the following definitions from Section 202 of the IPMC:

Condemn

Cost of such demolition ~~of~~ or emergency repairs

Equipment support

Inoperable motor vehicle

Labeled

Neglect

Openable area

Pest elimination

Strict liability offense

Ultimate deformation

Workmanlike

13VAC5-63-530. Chapter 5 Plumbing requirements.

A. Change the title of Chapter 5 of the IPMC to "Plumbing Requirements."

B. Delete the following sections from Chapter 5 of the IPMC:

1. Section 501.2 Responsibility.

2. Section 502 Required facilities (all provisions).

3. Section 503 Toilet rooms (all provisions).

4. Section 505.3 Supply.

5. Section 505.5.1 Abandonment of systems.

C. Change the following sections in Chapter 5 of the IPMC to read:

1. Section 501.1 General. The provisions of this chapter shall govern the maintenance of structures for plumbing systems, facilities, and fixtures.

2. Section 504.1 General. Required or provided plumbing systems and facilities shall be maintained in accordance with the applicable building code.

3. Section 504.2 Plumbing fixtures. All plumbing fixtures shall be maintained in a safe, sanitary, and working condition. A kitchen sink shall not be used as a substitute for a required lavatory.

4. Section 504.3 Plumbing system hazards. Where it is found that a plumbing system in a structure constitutes a hazard to the public, the occupants, or the structure, the code official shall require the defects to be corrected to eliminate the hazard.

5. Section 505.1 Supply. Required or provided water supply systems shall be maintained in accordance with the applicable building code. All water supply systems shall be free from obstructions, defects, and leaks.

6. Section 505.2 Protection of water supply systems. Protection of water supply systems shall be provided and maintained in accordance with the applicable building code.

7. Section 505.3 ~~Inspection and testing of backflow~~ Backflow prevention systems. ~~Inspection~~ Maintenance and testing shall comply with Sections 505.3.1 and 505.3.2.

8. Section 505.3.1 Maintenance. Backflow assemblies and air gaps shall be maintained in an operable condition.

9. Section 505.3.2 Testing. Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, double-detector check valve assemblies, and pressure vacuum breaker assemblies shall be tested at least annually. Records of testing shall be available for inspection by the code official. The testing procedure shall be performed in accordance with one of the following standards: ASSE 5010-1013-1, Sections 1 and 2; ASSE 5010-1015-1, Sections 1 and 2; ASSE 5010-1015-2; ASSE 5010-1015-3, Sections 1 and 2; ASSE 5010-1015-4, Sections 1 and 2; ASSE 5010-1020-1, Sections 1 and 2; ASSE 5010-1047-1, Sections 1, 2, 3, and 4; ASSE 5010-1048-1, Sections 1, 2, 3, and 4; ASSE 5010-1048-2; ASSE 5010-1048-3, Sections 1, 2, 3, and 4; ASSE 5010-1048-4, Sections 1, 2, 3, and 4; or CAN/CSA B64.10.

10. Section 505.4 Water heating facilities. Water heating facilities shall be maintained. Combination temperature and pressure-relief valves and relief valve discharge pipes shall be maintained on water heaters.

~~9.~~ 11. Section 505.5 Nonpotable water reuse systems. Where installed, nonpotable water reuse and rainwater collection and conveyance systems shall be maintained in a safe and sanitary condition. Where such systems are not property maintained, the systems shall be repaired to provide for safe and sanitary conditions~~,~~ or the system shall be abandoned in accordance with the following:

1. All system piping connecting to a utility provided or private water system shall be removed or disabled. Proper cross-connection control and backwater prevention measures shall comply with the applicable building code.

2. Where required, the distribution piping system shall be replaced with an approved potable water supply piping system.

3. The storage tank shall be secured from accidental access by sealing or locking tank inlets and access points or filling with sand or equivalent.

~~10.~~ 12. Section 506.1 Drainage and venting. Required or provided sanitary drainage and venting systems shall be maintained in accordance with the applicable building code.

~~11.~~ 13. Section 506.2 Maintenance. Every building drainage and sewer system shall function properly and be kept free from obstructions, leaks, and defects.

~~12.~~ 14. Section 507.1 General. Drainage of roofs and paved areas, yards and courts, and other open areas on the premises shall be discharged in a manner to protect the buildings and structures from the accumulation of overland water runoff.

D. Add the following sections to Chapter 5 of the IPMC:

1. Section 504.1.1 Public and employee facilities. Except for periodic maintenance or cleaning, access and use shall be provided to facilities at all times during occupancy of the premises in accordance with the applicable building code.

2. Section 504.2.1 Fixture clearances. Adequate clearances for usage and cleaning of plumbing fixtures shall be maintained as approved when installed.

3. Section 505.1.1 Tempered water. Tempered water shall be supplied to fixtures and facilities when required by the applicable building code.

4. Section 505.2.1 Attached hoses. Shampoo basin faucets, janitor sink faucets, and other hose bibs or faucets to which hoses are attached and left in place shall be protected by an approved atmospheric-type vacuum breaker or an approved permanently attached hose connection vacuum breaker.

5. Section 505.3.1 Inspections. Inspections shall be made of all backflow assemblies and air gaps to determine whether they are operable.

6. Section 505.3.2 Testing. Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, double-detector check valve assemblies, and pressure vacuum breaker assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The testing procedure shall be performed in accordance with one of the following standards: ASSE 5010-1013-1, Sections 1 and 2; ASSE 5010-1015-1, Sections 1 and 2; ASSE 5010-1015-2; ASSE 5010-1015-3, Sections 1 and 2; ASSE 5010-1015-4, Sections 1 and 2; ASSE 5010-1020-1, Sections 1 and 2; ASSE 5010-1047-1, Sections 1, 2, 3, and 4; ASSE 5010-1048-1, Sections 1, 2, 3, and 4; ASSE 5010-1048-2; ASSE 5010-1048-3, Sections 1, 2, 3, and 4; ASSE 5010-1048-4, Sections 1, 2, 3, and 4; or CAN/CSA B64.10.

13VAC5-63-540. Chapter 6 Mechanical and electrical requirements.

A. Delete the following sections from Chapter 6 of the IPMC:

1. Section 601.2 Responsibility.

2. Section 603.6 Energy conservation devices.

3. Section 604.2 Service.

4. Section 604.3.2 Abatement of electrical hazards associated with fire exposure.

B. Change the following sections in Chapter 6 of the IPMC to read:

1. Section 601.1 General. The provisions of this chapter shall govern the maintenance of mechanical and electrical facilities and equipment.

2. Section 602 Heating and cooling facilities.

3. Section 602.1 Facilities required. Heating and cooling facilities shall be maintained and operated in structures as required by this section.

4. Section 602.2 Heat supply. Every owner and operator of a Group R-2 apartment building or other residential building who rents, leases, or lets one or more dwelling unit, rooming unit, dormitory, or guestroom on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from October 15 to May 1 to maintain a temperature of not less than 68°F (20°C) in all habitable rooms, bathrooms, and toilet rooms. The code official may also consider modifications as provided in Section 104.5.2 when requested for unusual circumstances or may issue notice approving building owners to convert shared heating and cooling piping HVAC systems 14 calendar days before or after the established dates when extended periods of unusual temperatures merit modifying these dates.

Exception: When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the IPC.

5. Section 602.3 Occupiable work spaces. Indoor occupiable work spaces shall be supplied with heat during the period from October 1 to May 15 to maintain a minimum temperature of 65°F (18°C) during the period the spaces are occupied.

Exceptions:

1. Processing, storage, and operation areas that require cooling or special temperature conditions.

2. Areas in which persons are primarily engaged in vigorous physical activities.

6. Section 602.4 Cooling supply. Every owner and operator of a Group R-2 apartment building who rents, leases, or lets one or more dwelling units, rooming units, or guestrooms on terms, either expressed or implied, to furnish cooling to the occupants thereof shall supply cooling during the period from May 15 to October 1 to maintain a temperature of not more than 77°F (25°F) in all habitable rooms. The code official may also consider modifications as provided in Section 104.5.2 when requested for unusual circumstances or may issue notice approving building owners to convert shared heating and cooling piping HVAC systems 14 calendar days before or after the established dates when extended periods of unusual temperatures merit modifying these dates.

Exception: When the outdoor temperature is higher than the summer design temperature for the locality, maintenance of the room temperature shall not be required provided that the cooling system is operating at its full design capacity. The summer outdoor design temperature for the locality shall be as indicated in the IECC.

7. Section 603.1 Mechanical equipment and appliances. Required or provided mechanical equipment, appliances, fireplaces, solid fuel-burning appliances, cooking appliances, chimneys, vents, and water heating appliances shall be maintained in compliance with the code under which the appliances, system, or equipment was installed, kept in

safe working condition, and capable of performing the intended function.

8. Section 603.2 Removal of combustion products. Where required by the code under which installed, fuel-burning equipment and appliances shall be connected to an approved chimney or vent.

9. Section 603.5 Combustion air. Where required by the code under which installed, a supply of air for complete combustion of the fuel shall be provided for the fuel-burning equipment.

10. Section 604.1 Electrical system. Required or provided electrical systems and facilities shall be maintained in accordance with the applicable building code.

11. Section 604.3 Electrical system hazards. Where it is found that the electrical system in a structure constitutes a hazard to the occupants or the structure by reason of deterioration or damage or for similar reasons, the code official shall require the defects to be corrected to eliminate the hazard.

12. Section 604.3.1.1 Electrical equipment. Electrical distribution equipment, motor circuits, power equipment, transformers, wire, cable, flexible cords, wiring devices, ground fault circuit interrupters, surge protectors, molded case circuit breakers, low-voltage fuses, luminaires, ballasts, motors, and electronic control, signaling, and communication equipment that have been exposed to water shall be replaced in accordance with the provisions of the VEBC.

Exception: The following equipment shall be allowed to be repaired or reused where an inspection report from the equipment manufacturer, an approved representative of the equipment manufacturer, a third-party inspector per Section 113.7 of the VCC, or an electrical engineer indicates that the exposed equipment has not sustained damage that requires replacement:

1. Enclosed switches, rated 600 volts or less;
2. Busway, rated 600 volts or less;
3. Panelboards, rated 600 volts or less;
4. Switchboards, rated 600 volts or less;
5. Fire pump controllers, rated 600 volts or less;
6. Manual and magnetic motor controllers;
7. Motor control centers;
8. Alternating current high-voltage circuit breakers;
9. Low-voltage power circuit breakers;
10. Protective relays, meters, and current transformers;
11. Low-voltage and medium-voltage switchgear;
12. Liquid-filled transformers;
13. Cast-resin transformers;
14. Wire or cable that is suitable for wet locations and whose ends have not been exposed to water;
15. Wire or cable, not containing fillers, that is suitable for wet locations and whose ends have not been exposed to water;
16. Luminaires that are listed as submersible;
17. Motors; or
18. Electronic control, signaling, and communication equipment.

13. 604.3.2.1 Electrical equipment. Electrical switches, receptacles and fixtures, including furnace, water heating, security system, and power distribution circuits, that have been exposed to fire shall be replaced in accordance with the provisions of the VEBC.

Exception: Electrical switches, receptacles, and fixtures that shall be allowed to be repaired or reused where an inspection report from the equipment manufacturer or an approved representative of the equipment manufacturer, a third party licensed or certified electrician, or an electrical engineer indicates that the equipment has not sustained damage that requires replacement.

14. Section 605.1 Electrical components. Electrical equipment, wiring, and appliances shall be maintained in accordance with the applicable building code.

15. Section 605.2 Power distribution and receptacles. Required or provided power circuits and receptacles shall be maintained in accordance with the applicable building code, and ground fault and arc-fault circuit interrupter protection shall be provided where required by the applicable building code. All receptacle outlets shall have the appropriate faceplate cover for the location when required by the applicable building code.

16. Section 605.3 Lighting distribution and luminaires. Required or provided lighting circuits and luminaires shall be maintained in accordance with the applicable building code.

17. Section 605.4 Flexible cords. Flexible cords shall not be run through doors, windows, or cabinets or concealed within walls, floors, or ceilings.

18. Section 606.1 General. Elevators, dumbwaiters, and escalators shall be maintained in compliance with ASME A17.1. An annual periodic inspection is required of all elevators and escalators. A locality shall be permitted to require a six-month periodic inspection. Periodic tests are required of all elevators and escalators at the intervals listed in ASME A17.1 Appendix N. Periodic tests shall be witnessed by the code official. The code official may provide for such inspections and test witnessing by an approved agency or through agreement with other local certified elevator inspectors. An approved agency includes any individual, partnership, or corporation that has met the

certification requirements established in the VCS. The most current certificate of inspection shall be on display at all times within the elevator or attached to the escalator ~~or dumbwaiter~~, be available for public inspection in the office of the building operator~~,~~ or be posted in a publicly conspicuous location approved by the code official. Where not displayed in the elevator or attached ~~on~~ to the escalator ~~or dumbwaiter~~, there shall be a notice of where the certificate of inspection is available for inspection. ~~An annual periodic inspection and test is required of elevators and escalators. A locality shall be permitted to require a six-month periodic inspection and test. All periodic inspections shall be performed in accordance with Section 8.11 of ASME A17.1. The code official may also provide for such inspection by an approved agency or through agreement with other local certified elevator inspectors. An approved agency includes any individual, partnership, or corporation who has met the certification requirements established by the VCS.~~

C. Add the following sections to Chapter 6 of the IPMC:

1. Section 602.2.1 Prohibited use. In dwelling units subject to Section 602.2, one or more unvented room heaters shall not be used as the sole source of comfort heat in a dwelling unit.

2. Section 603.7 Fuel tanks and systems. Fuel gas or combustible or flammable liquid containers, tanks, and piping systems shall be maintained in compliance with the code under which they were installed, kept in safe working condition, and capable of performing the intended function~~,~~ or removed or abandoned in accordance with the Virginia Statewide Fire Prevention Code.

3. Section 607.2 Clothes dryer exhaust duct. Required or provided clothes dryer exhaust systems shall be maintained in accordance with the applicable building code.

13VAC5-63-545. Chapter 7 Fire safety requirements.

A. Delete the following sections from Chapter 7 of the IPMC:

1. Section 701.2 Responsibility.

2. Section ~~704.5 Fire department connection~~ 703.2 Unsafe conditions.

3. Section 703.7 Vertical shafts.

4. Section 704.1.2 Required fire protection systems.

5. Section 704.1.3 Fire protection systems.

6. Section 704.2.1 Records.

7. Table 704.2 FIRE PROTECTION SYSTEM MAINTENANCE STANDARDS.

8. Section 704.2.2 Records information.

9. Section 704.3.1 Emergency impairments.

10. Section 704.4 Removal of or tampering with equipment.

11. Section 704.4.1 Removal of or tampering with appurtenances.

12. Section 704.4.2 Removal of existing occupant hose lines.

13. Section 704.4.3 Termination of monitoring service.

~~3.~~ 14. Section 704.6.1 Where required.

~~4.~~ 15. Section 704.6.1.1 Group R-1.

~~5.~~ 16. Section 704.6.1.2 Groups R-2, R-3, R-4, and I-1.

~~6.~~ 17. Section 704.6.1.3 Installation near cooking appliances.

~~7.~~ 18. Section 704.6.1.4 Installation near bathrooms.

~~8.~~ 19. Section 704.6.2 Interconnection.

~~9.~~ 20. Section 704.6.3 Power source.

~~10.~~ 21. Section 704.6.4 Smoke detection system.

~~11.~~ 22. Section 704.7 Single-station and multiple-station smoke alarms.

23. Section 705.1 General.

B. Change the following sections in Chapter 7 of the IPMC:

1. Section 701.1 General. The provisions of this chapter shall govern the maintenance of fire safety facilities and equipment.

2. Section 702.1 General. The means of egress system shall be maintained in accordance with the applicable building code and Chapter 10 of the SFPC to provide a safe, continuous, and unobstructed path of travel from any point in a building or structure to the public way.

3. Section 702.2 Aisles. The required width of aisles shall be maintained in accordance with the applicable building code.

4. Section 702.3 Doors. Means of egress doors shall be maintained and~~,~~ to the extent required by the code in effect at the time of construction, shall be readily openable from the side from which egress is to be made without the need for keys, special knowledge, or effort.

5. Section 702.4 Emergency escape and rescue openings. Required emergency escape and rescue openings shall be maintained in accordance with the code in effect at the time of construction and to the extent required by the code in effect at the time of construction shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates, or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with the code that was in effect at the time of construction, and such devices shall be releasable or removable from the inside without the use of a key, tool, or force greater than that which is required for normal operation of the escape and rescue opening.

6. Section 703.3 Maintenance. The required fire-resistance rating of fire-resistance-rated construction, including walls,

firestops, shaft enclosures, partitions, smoke barriers, floors, fire-resistive coatings and sprayed fire-resistant materials applied to structural members, and joint systems, shall be maintained. Such elements shall be visually inspected annually by the owner and maintained as constructed in accordance with the applicable building code. Records of inspections and repairs shall be maintained. Where concealed, such elements shall not be required to be visually inspected by the owner unless the concealed space is accessible by the removal or movement of a panel, access door, ceiling tile, or entry to the space.

7. Section 703.8 Opening protective closers. Where openings are required to be protected, opening protectives shall be maintained self-closing or automatic-closing by smoke detection.

8. Section 704.1 General. Systems, devices, and equipment to detect a fire, actuate an alarm, or suppress or control a fire or any combination thereof shall be maintained in an operable condition at all times.

~~7.~~ 9. Section 704.1.1 Maintenance ~~and alterations~~. Fire protection systems shall be maintained in accordance with the ~~original installation standards for that system. Alterations and repairs to fire protection systems shall be done in accordance with the applicable building code and the applicable standards~~ applicable building code and the Statewide Fire Prevention Code.

~~8. Section 704.1.2 Required fire protection systems. Fire protection systems shall be repaired, operated, tested, and maintained in accordance with this code. A fire protection system for which a design option, exception, or reduction to the provisions of this code or the applicable building code has been granted shall be considered to be a required system.~~

~~9. Section 704.1.3 Fire protection systems. Fire protection systems shall be maintained in accordance with the Statewide Fire Prevention Code.~~

~~10. Section 704.3.1 Preplanned impairment programs. Preplanned impairments shall be authorized by the impairment coordinator. Before authorization is given, a designated individual shall be responsible for verifying that all of the following procedures have been implemented:~~

~~1. The extent and expected duration of the impairment have been determined.~~

~~2. The areas or buildings involved have been inspected, and the increased risks determined.~~

~~3. Recommendations have been submitted to management or the building owner or manager.~~

~~4. The fire department has been notified.~~

~~5. The insurance carrier, the alarm company, the building owner or manager, and other authorities having jurisdiction have been notified.~~

~~6. The supervisors in the areas to be affected have been notified.~~

~~7. A tag impairment system has been implemented.~~

~~8. Necessary tools and materials have been assembled on the impairment site.~~

~~11. Section 704.4 Removal of or tampering with equipment. It shall be unlawful for any person to remove, tamper with, or otherwise disturb any fire hydrant, fire detection and alarm system, fire suppression system, or other fire appliance required by this code or the applicable building code except for the purpose of extinguishing fire, for training purposes, for recharging or making necessary repairs, or where approved by the fire code official.~~

~~12. Section 704.4.2 Removal of existing occupant use hose lines. The fire code official is authorized to permit the removal of existing occupant use hose lines where all of the following conditions exist:~~

~~1. Installation is not required by this code or the applicable building code.~~

~~2. The hose line would not be utilized by trained personnel or the fire department.~~

~~3. The remaining outlets are compatible with local fire department fittings.~~

~~13.~~ 10. Section 704.2 Records. Inspection, testing, and maintenance records shall be maintained in accordance with the Statewide Fire Prevention Code.

11. Section 704.3 Systems out of service. Where a required fire protection system is taken out of service, it shall be taken out of service in accordance with the Statewide Fire Prevention Code, and the fire department and the fire code official shall be notified immediately.

12. Section 704.5 Fire department connection access. Ready access to fire department connections shall be maintained at all times.

13. Section 704.5.1 Clear space around connections. A working space of not less than 36 inches (914 mm) in width, 36 inches (914 mm) in depth, and 78 inches (1981 mm) in height shall be maintained in front of and to the sides of wall-mounted fire department connections and around the circumference of free-standing fire department connections.

14. Section 704.6 Single-station and multiple-station smoke alarms. Required or provided single-station and multiple-station smoke alarms shall be maintained in accordance with the applicable building code.

13VAC5-63-549. Chapter 8 Referenced standards.

Change the referenced standards in Chapter 8 of the IPMC as follows (standards not shown remain the same):

Standard reference number	Title	~~Referenced in code section number~~
ASSE 5010-1013-1	Field Test Procedure for a Reduced Pressure Principle Assembly Using a Differential Pressure Gauge, 1991	~~505.3.2~~
ASSE 5010-1015-1	Field Test Procedure for a Double Check Valve Assembly Using a Duplex Gauge, 1991	~~505.3.2~~
ASSE 5010-1015-2	Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge - High- and Low-Pressure Hose Method, 1991	~~505.3.2~~
ASSE 5010-1015-3	Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge - High Pressure Hose Method, 1991	~~505.3.2~~
ASSE 5010-1015-4	Field Test Procedure for a Double Check Valve Assembly Using a Site Tube, 1991	~~505.3.2~~
ASSE 5010-1020-1	Field Test Procedures for a Pressure Vacuum Breaker Assembly, 1991	~~505.3.2~~
ASSE 5010-1047-1	Field Test Procedure for a Reduced Pressure Detector Assembly Using a Differential Pressure Gauge, 1991	~~505.3.2~~
ASSE 5010-1048-1	Field Test Procedure for a Double Check Detector Assembly Using a Duplex Gauge, 1991	~~505.3.2~~
ASSE 5010-1048-2	Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge - High- and Low-Pressure Hose Method, 1991	~~505.3.2~~
ASSE 5010-1048-3	Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge - High-Pressure Hose Method, 1991	505.3.2
ASSE 5010-1048-4	Field Test Procedure for a Double Check Detector Assembly Using a Site Tube, 1991	505.3.2
CAN/CSA-B64.10-01	Manual for the Selection and Installation of Backflow Prevention Devices/Manual for the Maintenance and Field Testing of Backflow Prevention Devices	505.3.2

DOCUMENTS INCORPORATED BY REFERENCE (13VAC5-63)

International Code Council, Inc., 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070 (http://www.iccsafe.org/):

~~International Building Code - 2018 Edition~~

~~International Energy Conservation Code - 2018 Edition~~

~~International Existing Building Code - 2018 Edition~~

~~International Fire Code - 2018 Edition~~

~~International Fuel Gas Code - 2018 Edition~~

~~International Mechanical Code - 2018 Edition~~

~~International Property Maintenance Code - 2018 Edition~~

~~International Plumbing Code - 2018 Edition~~

~~International Residential Code - 2018 Edition~~

~~International Swimming Pool and Spa Code - 2018 Edition~~

~~International Zoning Code - 2018 Edition~~

~~ICC 600 - 14, Standard for Residential Construction in High-wind Regions~~

~~ICC/ANSI A117.1-09, Accessible and Usable Buildings and Facilities, Approved November 26, 2003~~

International Building Code - 2021 Edition

International Energy Conservation Code - 2021 Edition

International Existing Building Code - 2021 Edition

International Fire Code - 2021 Edition

International Fuel Gas Code - 2021 Edition

International Mechanical Code - 2021 Edition

International Property Maintenance Code - 2021 Edition

International Plumbing Code - 2021 Edition

International Residential Code - 2021 Edition

International Swimming Pool and Spa Code - 2021 Edition

International Zoning Code - 2021 Edition

ICC 600 - 20, Standard for Residential Construction in High-wind Regions

ICC/ANSI A117.1-17, Accessible and Usable Buildings and Facilities, Approved November 26, 2003

American Architectural Manufacturers Association, 1827 Walden Office Square, Suite 550 Schaumburg, IL 60173-4268

AAMA/WDMA/CSA 101/I.S.2/A440 - 05, North American Fenestration Standard/Specification for Windows, Doors, and Skylights

American National Standards Institute, 25 West 43rd Street, Fourth Floor, New York, NY 10036

ANSI/DASMA 108 - 2017, Standard Method for Testing Sectional Garage Doors, Rolling Doors and Flexible Doors: Determination of Structural Performance Under Uniform Static Air Pressure Difference

~~ANSI/RESNET/ICC 380 2016, Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution and Airflow of Mechanical Ventilation Systems~~

~~CSA B805 2018/ICC 805 2018, Rainwater Harvesting Systems~~

ANSI/RESNET/ICC 380 - 2019, Standard for Testing Airtightness of Building Enclosures, Airtightness of Heating and Cooling Air Distribution and Airflow of Mechanical Ventilation Systems

ANSI LC1/CSA 6.26-18, Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST)

Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206 (https://www.acca.org/):

Manual J-16, Residential Load Calculation, Eighth Edition

Manual S-14, Residential Equipment Selection

Air Movement and Control Association International, 30 West university Drive, Arlington Heights, IL 60004-1806

AMCA 500D-98, Laboratory Methods for Testing Dampers for Rating

American Concrete Institute, 38800 Country Club Drive, Farmington Hills, MI 48331 (http://www.concrete.org/)

ACI 318-14, Building Code Requirements for Structural Concrete~~, American Concrete Institute, 38800 Country Club Drive, Farmington Hills, MI 48331 (http://www.concrete.org/)~~

ACI 562-21, Assessment, Repair, and Rehabilitation of Existing Concrete Structures

American Iron and Steel Institute, 25 Massachusetts Avenue, NW Suite 800, Washington, DC 20001

~~AISI S230-15, Standard for Cold-formed Steel Framing - Prescriptive Method for One- and Two-family Dwellings~~

AISI S230-19, Standard for Cold-formed Steel Framing - Prescriptive Method for One- and Two-family Dwellings

American Petroleum Institute, 1220 L Street, NW, Washington, DC 20005-4070 (http://www.api.org/):

API 650-09, Welded Tanks for Oil Storage, Eleventh Edition, June 2007 (Addendum 1, November 2008, Addendum 2, November 2009, effective May 1, 2010)

API 653-09, Tank Inspection, Repair, Alteration, and Reconstruction

~~ANSI LC1/CSA 6.26-18, Fuel Gas Piping Systems Using Corrugated Stainless Steel Tubing (CSST), American National Standards Institute, 25 West 43rd Street, Fourth Floor, New York, NY 10036~~

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1791 Tullie Circle, NE, Atlanta, GA 30329-2305 (https://www.ashrae.org/)

ASHRAE 34-2019, Designation and Safety Classification of Refrigerants

ASHRAE 62.1-13, Ventilation for Acceptable Indoor Air Quality

ASHRAE 90.1-04, Energy Standard for Buildings Except Low-rise Residential Buildings

American Society of Testing Materials International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (http://www.astm.org/):

~~ASTM C199-84(2011), Standard Test Method for Pier Test for Refractory Mortar~~

~~ASTM C315-07(2011), Standard Specification for Clay Flue Liners and Chimney Pots~~

ASTM C90-2016A, Specification for Load-bearing Concrete Masonry Units

ASTM C199-84 (2016), Standard Test Method for Pier Test for Refractory Mortar

ASTM C315-07 (2016), Standard Specification for Clay Flue Liners and Chimney Pots

ASTM C1261-13, Standard Specification for Firebox Brick for Residential Fireplaces

ASTM D1003-13, Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics

ASTM D1557-12e1, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3(2700 kN-m/m^3))

~~ASTM E84-2016, Standard Test Methods for Surface Burning Characteristics of Building Materials~~

ASTM D2846/D2846--2017BE1, Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems

ASTM E84-2018B, Standard Test Methods for Surface Burning Characteristics of Building Materials

ASTM E90-90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions

~~ASTM E108-11, Standard Test Methods for Fire Tests of Roof Coverings~~

~~ASTM E119-2016, Standard Test Methods for Fire Tests of Building Construction and Materials~~

ASTM E96-00e01, Standard Test Methods for Water Vapor Transmission of Materials

ASTM E108-17, Standard Test Methods for Fire Tests of Roof Coverings

ASTM E119-2018B, Standard Test Methods for Fire Tests of Building Construction and Materials

ASTM E283-04, Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen

ASTM E329-02, Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

ASTM E330/E330M-14, Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference

ASTM F493-14, Specification for Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings

ASTM E779-10, Standard Test Method for Determining Air Leakage Rate by Fan Pressurization

ASTM E1354-17, Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter

ASTM E1827-11, Standard Test Methods for Determining Airtightness of Buildings Using an Orifice Blower Door

ASTM F1504-14, Standard Specification for Folded Poly (Vinyl Chloride (PVC) Pipe for Existing Sewer and Conduit Rehabilitation

ASTM F1871-11, Standard Specification for Folded/Formed Poly (Vinyl Chloride) Pipe Type A for Existing Sewer and Conduit Rehabilitation

ASTM F2006-17, Standard Safety Specification for Window Fall Prevention Devices for Nonemergency Escape (Egress) and Rescue (Ingress) Windows

ASTM F2090-17, Standard Specification for Window Fall Prevention Devices with Emergency Escape (Egress) Release Mechanisms

National Standards of Canada, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W5N6 (http://www.csa.ca)

CAN/CSA-B64.10-01, Manual for the Selection and Installation of Backflow Prevention Devices/Manual for the Maintenance and Field Testing of Backflow Prevention Devices, June 2003,

CSA B805 - 2018/ICC 805 - 2018, Rainwater Harvesting Systems

American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990 (https://www.asme.org/):

~~ASME A17.1/CSA B44-16, Safety Code for Elevators and Escalators~~

ASME A17.1/CSA B44-19, Safety Code for Elevators and Escalators

ASME A17.3 2008, Safety Code for Existing Elevators and Escalators

ASME A18.1 2008, Safety Standard for Platform Lifts and Stairway Chairlifts

American Society of Sanitary Engineering, 901 Canterbury Road, Suite A, Westlake, OH 44145 (http://www.asse-plumbing.org/):

ASSE 1010-2004, Performance Requirements for Water Hammer Arrestors

ASSE 1022-03, Performance Requirements for Backflow Preventer for Beverage Dispensing Equipment

ASSE 1024-04, Performance Requirements for Dual Check Valve Type Backflow Preventers (for Residential Supply Service or Individual Outlets)

ASSE 5010-1013-1, Field Test Procedure for a Reduced Pressure Principle Assembly Using a Differential Pressure Gauge, 1991

ASSE 5010-1015-1, Field Test Procedure for a Double Check Valve Assembly Using a Duplex Gauge, 1991

ASSE 5010-1015-2, Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge - High- and Low-Pressure Hose Method, 1991

ASSE 5010-1015-3, Field Test Procedure for a Double Check Valve Assembly Using a Differential Pressure Gauge - High Pressure Hose Method, 1991

ASSE 5010-1015-4, Field Test Procedure for a Double Check Valve Assembly Using a Site Tube, 1991

ASSE 5010-1020-1, Field Test Procedures for a Pressure Vacuum Breaker Assembly, 1991

ASSE 5010-1047-1, Field Test Procedure for a Reduced Pressure Detector Assembly Using a Differential Pressure Gauge, 1991

ASSE 5010-1048-1, Field Test Procedure for a Double Check Detector Assembly Using a Duplex Gauge, 1991

ASSE 5010-1048-2, Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge - High- and Low-Pressure Hose Method, 1991

ASSE 5010-1048-3, Field Test Procedure for a Double Check Detector Assembly Using a Differential Pressure Gauge - High-Pressure Hose Method, 1991

ASSE 5010-1048-4, Field Test Procedure for a Double Check Detector Assembly Using a Site Tube, 1991

American Society of Civil Engineers/Structural Engineering Institute, 1801 Alexander Bell Drive, Reston, VA 20191-4400 (http://www.asce.org/sei/)

~~ASCE/SEI 7-16, Minimum Design Loads for Buildings and Other Structures~~

ASCE/SEI 7-22, Minimum Design Loads for Buildings and Other Structures

ASCE/SEI 24-14, Flood Resistant Design and Construction

ASCE/SEI 41-13, Seismic Evaluation and Retrofit of Existing Buildings

American Wood Council, 222 Catocin Circle, Suite 201, Leesburg, VA 20175 (http://www.awc.org/):

~~AWC NDS-15, National Design Specification for Wood Construction with 2005 Supplement~~

~~AWC STJR-15, Span Table for Joists and Rafters~~

AWC WFCM-18, Wood Frame Construction Manual for One- and Two-Family Dwellings

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471 (http://www.nfpa.org/):

~~NFPA 13-16, Installation of Sprinkler Systems~~

~~NFPA 13R-16, Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height~~

~~NFPA 70-17, National Electrical Code~~

~~NFPA 72-16, National Fire Alarm Code~~

~~NFPA 91-15, Standard for Exhaust Systems for Air Conveying of Vapors, Mists and Particulate Solids~~

~~NFPA 99-15, Health Care Facilities Code~~

~~NFPA 101-15, Life Safety Code~~

~~NFPA 105-16, Standard for the Installation of Smoke Door Assemblies~~

~~NFPA 285-17, Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Nonload-bearing Wall Assemblies Containing Combustible Components~~

NFPA 13-19, Installation of Sprinkler Systems

NFPA 13R-19, Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height

NFPA 70-20, National Electrical Code

NFPA 72-19, National Fire Alarm Code

NFPA 91-20, Standard for Exhaust Systems for Air Conveying of Vapors, Mists and Particulate Solids

NFPA 99-21, Health Care Facilities Code

NFPA 101-21, Life Safety Code

NFPA 105-19, Standard for the Installation of Smoke Door Assemblies

NFPA 285-19, Standard Method of Test for the Evaluation of Flammability Characteristics of Exterior Nonload-bearing Wall Assemblies Containing Combustible Components

NFPA 495-18, Explosive Materials Code

~~NFPA 701-15, Standard Methods of Fire Tests for Flame-propagation of Textiles and Films~~

NFPA 701-19, Standard Methods of Fire Tests for Flame-propagation of Textiles and Films

NFPA 720-15, Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment

National Fenestration Rating Council, Inc., 6305 Ivy Lane, Suite 140, Greenbelt, MD 20770

~~NFRC 100 - 2017, Procedure for Determining Fenestration Products U-factors~~

NFRC 100 - 2020, Procedure for Determining Fenestration Products U-factors

NFRC 400 - 2001, Procedure for Determining Fenestration Product Air Leakage--Second Edition

NSF 50-2015, Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities, NSF International, 789 Dixboro Road, P.O. Box 130140, Ann Arbor, MI 48113 (http://nsf.org)

TFI RMIP-09, Aboveground Storage Tanks Containing Liquid Fertilizer, Recommended Mechanical Integrity Practices, December 2009, The Fertilizer Institute, 820 First Street, NE, Suite 430, Washington, DC 20002

Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062 (http://www.ul.com):

~~UL 217-06, Single- and Multiple-station Smoke Alarms-with revisions through April 2012~~

UL 217-15, Single- and Multiple-station Smoke Alarms-with revisions through November 2016

UL 109-97, Tube Fittings for Flammable and Combustible Fluids, Refrigeration Service and Marine Use

UL 207—2009, Refrigerant-containing Components and Accessories, Nonelectrical—with revisions through June 2014

UL 263-11, Fire Tests of Building Construction and Materials

~~UL 723-2008, Standard for Test of Surface Burning Characteristics of Building Materials with Revisions through September 2010~~

UL 474-2015, Standard for Safety Dehumidifiers

UL 484-2019, Standard for Room Air Conditioners

UL 723-2018, Standard for Test of Surface Burning Characteristics of Building Materials

UL 790-04, Standard Test Methods for Fire Tests of Roof Coverings-with Revisions through October 2008

~~UL 1784-01, Air Leakage Tests of Door Assemblies, revised July 2009~~

~~UL 1978-2010, Grease Ducts~~

~~UL 2034-2008, Standard for Single and Multiple Station Carbon Monoxide Alarms, revised February 2009~~

UL 1784-15, Air Leakage Tests of Door Assemblies, with Revisions through February 2015

UL 2034-2017, Standard for Single and Multiple Station Carbon Monoxide Alarms, with revisions through September 2018

UL 2075-2013, Gas and Vapor Detectors and Sensors (Second Edition, March 5, 2013)

UL/CSA 60335-2-40-2019, Standards for Household and Similar Electrical Appliances, Safety part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers

UL/CSA 60335-2-89-2021, Household and Similar Electrical Appliances-Safety-Part 2-89: Particular Requirements for Commercial Refrigerating Appliances and Ice-Makers with an Incorporated or Remote Refrigerant Unit or Motor-Compressor

UL 8782-2017, Pollution Control Units for Commercial Cooking

Interim Remediation Guidance for Homes with Corrosion from Problem Drywall, April 2, 2010, Joint Report, Consumer Products Safety Commission and Department of Housing and Urban Development

VA.R. Doc. No. R22-7022; Filed January 27, 2023, 11:51 a.m.

Proposed Regulation

REGISTRAR'S NOTICE: The Board of Housing and Community Development is claiming an exemption from Article 2 of the Administrative Process Act pursuant to § 2.2-4006 A 12 of the Code of Virginia, which excludes regulations adopted by the Board of Housing and Community Development pursuant to the Statewide Fire Prevention Code (§ 27-94 et seq.), the Industrialized Building Safety Law (§ 36-70 et seq.), the Uniform Statewide Building Code (§ 36-97 et seq.), and § 36-98.3 of the Code of Virginia, provided the board (i) provides a Notice of Intended Regulatory Action in conformance with the provisions of § 2.2-4007.01 of the Code of Virginia, (ii) publishes the proposed regulation and provides an opportunity for oral and written comments as provided in § 2.2-4007.03 of the Code of Virginia, and (iii) conducts at least one public hearing as provided in §§ 2.2-4009 and 36-100 of the Code of Virginia prior to the publishing of the proposed regulations. The board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Title of Regulation: **13VAC5-91. Virginia Industrialized Building Safety Regulations (amending 13VAC5-91-20, 13VAC5-91-60, 13VAC5-91-115, 13VAC5-91-120, 13VAC5-91-140, 13VAC5-91-160, 13VAC5-91-170).**

Statutory Authority: § 36-73 of the Code of Virginia.

Public Hearing Information:

May 8, 2023 - 10 a.m. - Virginia Housing Center, 4224 Cox Road, Glen Allen, VA 23060

Public hearing information: https://townhall.virginia.gov/L/viewmeeting.cfm?meetingid=37601

Public Comment Deadline: May 9, 2023.

Agency Contact: Kyle Flanders, Senior Policy Analyst, Department of Housing and Community Development, Main Street Centre, 600 East Main Street, Suite 300, Richmond, VA

23219, telephone (804) 786-6761, FAX (804) 371-7090, TDD (804) 371-7089, or email kyle.flanders@dhcd.virginia.gov.

Background: The Industrialized Building Safety Regulations (IBSR) govern the in-factory construction of industrialized buildings, which are also known as modular buildings. The regulation provides the same standards for construction as those buildings constructed on-site and regulated by the Virginia Uniform Statewide Building Code (13VAC5-63). Both regulations utilize nationally recognized model building codes and standards to provide the technical requirements for the actual construction of the regulated buildings. Every three years, new editions of the model codes become available. At that time, the Board of Housing and Community Development (BHCD) initiates a regulatory action to incorporate the newest editions of the model codes into the regulation and accepts proposals for changes to the regulation from stakeholders and the public. The Department of Housing and Community Development staff maintains mailing lists for workgroups involving different subject areas of regulation and conducts workgroup meetings attended by stakeholder groups and the public to develop consensus recommendations, when possible, concerning proposals that have been submitted. The department uses an online program incorporating the provisions of the regulation and the model codes and standards to facilitate the submittal of proposals. A public hearing is held during the workgroup meeting stage of the process and a comment period established. Once workgroup meetings are completed, the BHCD has a series of meetings to consider each proposal, and those proposals approved are incorporated into the proposed regulation. After the publishing of the proposed regulation, the BHCD establishes a comment period and holds an additional public hearing. The BHCD then meets to consider public comments to develop a final regulation to complete the regulatory process.

Summary:

The proposed amendments include: (i) an editorial change regarding approval of intermodal shipping containers as building modules or components of an industrialized building; (ii) an editorial change related to the issuance of notices of violations under the IBSR; (iii) clarifying that the local building official may approve a change of occupancy of a registered industrialized building; (iv) clarifying the options for approval of unregistered industrialized buildings; (v) clarifying that the report to the SBCO is for moved buildings with active violations; (vi) incorporating by reference new International Code Council/Modular Building Institute 1200-2021 and 1205-2021 Offsite Construction Standards; and (vii) updating the International Code Council standards incorporated by reference into the regulation to the most current edition.

13VAC5-91-20. Application and compliance.

A. In accordance with § 36-81 of the Code of Virginia, registered industrialized buildings shall be acceptable in all localities as meeting the requirements of the Industrialized Building Safety Law (Chapter 4 (§ 36-70 et seq.) of Title 36 of the Code of Virginia), which shall supersede the building codes and regulations of the counties, municipalities, and state agencies. Local requirements affecting industrialized buildings, including zoning, utility connections, preparation of the site, and maintenance of the unit shall remain in full force and effect. All building officials are authorized to and shall enforce the provisions of the Industrialized Building Safety Law (Chapter 4 (§ 36-70 et seq.) of Title 36 of the Code of Virginia) and this chapter.

B. In accordance with § 36-78 of the Code of Virginia, no person, firm, or corporation shall offer for sale or rental, or sell or rent, any industrialized building subject to any provisions of this chapter unless it conforms with the applicable provisions of this chapter.

Further, any industrialized building constructed before January 1, 1972, shall remain subject to the ordinances, laws, or regulations in effect at the time such industrialized building was constructed. Additionally, as a requirement of this chapter, any industrialized building bearing the label of a compliance assurance agency shall remain subject to the provisions of this chapter that were effective when such building was constructed, regardless of whether the building has been relocated.

C. In accordance with § 36-99 of the Code of Virginia and in accordance with the USBC, the installation or erection of industrialized buildings and alterations, additions, or repairs to industrialized buildings are regulated by the USBC and not this chapter. The USBC provides for administrative requirements for permits, inspections, and certificates of occupancy for such work.

D. The use of off-site manufactured intermodal freight containers, moving containers, or storage containers as building modules or components of an industrialized building ~~must~~ may be approved by the administrator in accordance with 13VAC5-91-150.

In reviewing the use of intermodal freight containers as structural building components, the administrator ~~will~~ may accept evaluation reports from accredited third-party evaluation services.

E. Off-site manufactured intermodal freight containers, moving containers, and storage containers placed on site temporarily or permanently for use as a storage container are not subject to this chapter.

13VAC5-91-60. Notice of violation from administrator.

In accordance with § 36-82 of the Code of Virginia, whenever the administrator shall find any violation of this chapter, ~~he~~ the administrator shall order the person responsible ~~therefor~~ to bring the building into compliance within a reasonable time~~, to be fixed in the order~~. In addition, as a requirement of this chapter, the administrator may request assistance from the

building official for enforcement of this section. Any order issued by the administrator pursuant to this section shall contain a statement explaining the right of appeal of the order.

13VAC5-91-115. Change of occupancy classification.

When the occupancy classification of a registered industrialized building is ~~proposed to be~~ changed, ~~a~~ the change of occupancy shall be in accordance with one of the following:

1. A compliance assurance agency shall inspect the building, including any disassembly necessary, to determine whether compliance may be achieved for a change of occupancy classification in accordance with this chapter. If factory plans are available, then disassembly is not required to the extent that the factory plans can be reasonably verified to reflect the actual construction. Once any necessary work is completed, the compliance assurance agency shall prepare a report documenting the method utilized for the change of occupancy and any alterations to the building to achieve compliance. When the report is complete, the compliance assurance agency shall (i) mark the building with a new compliance assurance agency label in accordance with 13VAC5-91-210, which replaces the existing label; (ii) place a new manufacturer's data plate on the building in accordance with 13VAC5-91-245, which replaces the existing manufacturer's data plate and reflects the new occupancy classification; and (iii) forward a copy of the report and new data plate to the SBCO; or

2. A building official shall determine that a change of occupancy for an industrialized building meets the requirements of the USBC. The building official may require the submittal of plans approved by a registered design professional or inspection by an approved third party. A change of occupancy of a registered industrialized building, in accordance with the USBC and approved by the building official, must be reported to SBCO and the registration seal and data plate removed prior to occupancy.

13VAC5-91-120. Unregistered industrialized buildings.

The building official shall determine whether any unregistered industrialized building complies with this chapter and shall require any noncomplying unregistered building to be brought into compliance with this chapter. ~~The building official shall enforce all applicable requirements of this chapter including those relating to the sale, rental and disposition of noncomplying buildings.~~ in accordance with one of the following:

1. The unregistered building shall be registered in accordance with 13VAC5-91-125; or

2. The building official shall approve the unregistered building in accordance with the USBC. The building official may require submission of full plans and specifications for each building. Concealed parts of the building may be exposed to the extent necessary to permit inspection to determine compliance with the applicable requirements. The building official may also accept reports of inspections and tests from individuals or agencies deemed acceptable to the building official.

13VAC5-91-140. Report to the SBCO.

If ~~the~~ a building, which has active violations, is moved from ~~the~~ a jurisdiction before the violations have been corrected, the building official shall make a prompt report of the circumstances to the SBCO. The report shall include all of the following:

1. A list of the uncorrected violations.

2. All information contained on the label pertinent to the identification of the building, the manufacturer, and the compliance assurance agency.

3. The number of the Virginia registration seal.

4. The new destination of the building, if known.

5. The party responsible for moving the building.

13VAC5-91-160. Use of model codes and standards.

A. Industrialized buildings entering the production assembly line after the effective date of the ~~2018~~ 2021 edition of this chapter shall comply with all applicable requirements of the codes and standards listed in subsection B of this section except that the following codes and standards may be used for industrialized buildings entering the assembly line during a one-year period after the effective date of the ~~2018~~ 2021 edition of this chapter:

1. ICC International Building Code - ~~2015~~ 2018 Edition

2. ICC International Plumbing Code - ~~2015~~ 2018 Edition

3. ICC International Mechanical Code - ~~2015~~ 2018 Edition

4. National Fire Protection Association Standard Number 70 (National Electrical Code) - ~~2014~~ 2017 Edition

5. ICC International Fuel Gas Code - ~~2015~~ 2018 Edition

6. ICC International Energy Conservation Code - ~~2015~~ 2018 Edition

7. ICC International Residential Code - ~~2015~~ 2018 Edition

B. The following documents are adopted and incorporated by reference to be an enforceable part of this chapter:

1. ICC International Building Code - ~~2018~~ 2021 Edition

2. ICC International Plumbing Code - ~~2018~~ 2021 Edition

3. ICC International Mechanical Code - ~~2018~~ 2021 Edition

4. National Electrical Code - ~~2017~~ 2020 Edition

5. ICC International Fuel Gas Code - ~~2018~~ 2021 Edition

6. ICC International Energy Conservation Code - ~~2018~~ 2021 Edition

7. ICC International Residential Code - ~~2018~~ 2021 Edition

~~Note:~~

8. ICC/MBI 1200-2021 Standard for Off-site Construction: Planning, Design, Fabrication and Assembly

9. ICC/MBI 1205-2021 Standard for Off-site construction: Inspection and Regulatory Compliance

C. As the ~~2018~~ 2021 editions of the International Codes are incorporated by reference as the construction standards for use with these regulations, this chapter is also referred to as the ~~2018~~ 2021 edition of the Virginia Industrialized Building Safety Regulations or the ~~2018~~ 2021 edition of this chapter.

The codes and standards referenced ~~above~~ in this section may be procured from:

International Code Council, Inc.
500 New Jersey Avenue, NW, 6th Floor
Washington, DC 20001-2070

13VAC5-91-170. Amendments to codes and standards.

A. All requirements of the referenced model codes and standards that relate to fees, permits, certificates of use and occupancy, approval of plans and specifications, and other procedural, administrative, and enforcement matters that address the same subject matter and impose differing requirements are deleted and replaced by the procedural, administrative, and enforcement provisions of this chapter.

B. The referenced codes and standards are amended as set forth in the USBC.

DOCUMENTS INCORPORATED BY REFERENCE (13VAC5-91)

International Code Council, 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001-2070 (http://shop.iccsafe.org/codes.html):

ICC International Plumbing Code - ~~2015 and~~ 2018 ~~Editions~~ Edition

ICC International Mechanical Code - ~~2015 and~~ 2018 ~~Editions~~ Edition

ICC International Building Code - ~~2015 and~~ 2018 ~~Editions~~ Edition

ICC International Residential Code - ~~2015 and~~ 2018 ~~Editions~~ Edition

ICC International Fuel Gas Code - ~~2015 and~~ 2018 ~~Editions~~ Edition

ICC International Energy Conservation Code - ~~2015 and~~ 2018 ~~Editions~~ Edition

ICC International Plumbing Code - 2021 Edition

ICC International Mechanical Code - 2021 Edition

ICC International Building Code - 2021 Edition

ICC International Residential Code - 2021 Edition

ICC International Fuel Gas Code - 2021 Edition

ICC International Energy Conservation Code - 2021 Edition

ICC/MBI 1200-2021 Standard for Off-site Construction: Planning, Design, Fabrication and Assembly

ICC/MBI 1205-2021 Standard for Off-site construction: Inspection and Regulatory Compliance

~~NFPA 70, National Electrical Code - 2014 and 2017 Editions,~~ National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471 (http://www.nfpa.org/)

NFPA 70, National Electrical Code - 2017 Edition,

NFPA 70, National Electrical Code - 2020 Edition

ASTM Standard Number E541-10 - Standard Specification for Agencies Engaged in System Analysis and Compliance Assurance for Manufactured Building, American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 (http://www.astm.org/)

VA.R. Doc. No. R22-7021; Filed January 27, 2023, 11:53 a.m.

TITLE 18. PROFESSIONAL AND OCCUPATIONAL LICENSING

BOARD OF MEDICINE

Forms

REGISTRAR'S NOTICE: Forms used in administering the regulation have been filed by the agency. The forms are not being published; however, online users of this issue of the Virginia Register of Regulations may click on the name of a form with a hyperlink to access it. The forms are also available from the agency contact or may be viewed at the Office of the Registrar of Regulations, 900 East Main Street, 11th Floor, Richmond, Virginia 23219.

Title of Regulation: **18VAC85-170. Regulations Governing the Practice of Genetic Counselors.**

Agency Contact: Erin Barrett, Regulatory Coordinator, Department of Health Professions, 9960 Mayland Drive, Suite 300, Henrico, VA 23233, telephone (804) 367-4688, or email erin.barrett@dhp.virginia.gov.

FORMS (18VAC85-170)

Instructions for Completing an Application to Practice as a Genetic Counselor, available online at https://www.dhp.virginia.gov/medicine/medicine_forms.htm#Genetic

Instructions for Completing an Application to Practice Genetic Counseling in Virginia (rev. 12/2017)

Instructions for Completing an Application for a Temporary License to Practice in "Active Candidate Status" to Practice Genetic Counseling in Virginia (rev. 6/2017)

Form B, Employment History (rev. 7/2017)

Form B Supplemental Form (rev. 9/2018)

Continued Competency Activity and Assessment Form (eff. 6/2017)

Genetic Counselor Reinstatement Instructions and Application (eff. 2/2023)

VA.R. Doc. No. R23-7479; Filed February 6, 2023, 2:37 p.m.

TITLE 23. TAXATION

DEPARTMENT OF TAXATION

Action Withdrawn

Title of Regulation: **23VAC10-120. Corporation Income Tax (adding 23VAC10-120-103).**

Statutory Authority: § 58.1-203 of the Code of Virginia.

The Department of Taxation has WITHDRAWN the regulatory action for **23VAC10-120, Corporation Income Tax,** which was published as a Notice of Intended Regulatory Action in 23:25 VA.R. 4103-4104 August 20, 2007. This action is being withdrawn because the Department of Taxation started this action in 2007 but did not complete it. The purpose of the proposed action was intended to amend the corporate income tax law by adding § 58.1-402 B 8 and B 9 of the Code of Virginia, which requires the corporation to add back any royalties and interest paid to a related entity in such a situation. In the event that the department decides to amend this regulation in the future, it will file a new action.

Agency Contact: John Cox, Analyst, Department of Taxation, 600 East Main Street, Richmond, VA 23261, telephone (804) 371-2338, FAX (804) 371-2355, or email john.cox@tax.virginia.gov.

VA.R. Doc. No. R07-713; Filed January 31, 2023, 7:05 p.m.

Action Withdrawn

Title of Regulation: **23VAC10-210. Retail Sales and Use Tax (amending 23VAC10-210-410).**

Statutory Authority: § 58.1-203 of the Code of Virginia.

The Department of Taxation has WITHDRAWN the regulatory action for **23VAC10-210, Retail Sales and Use Tax,** which was published as a Notice of Intended Regulatory Action in 23:25 VA.R. 4103 August 20, 2007. This action is being withdrawn because the Department of Taxation started this action in 2007 but did not complete it. The purpose of the proposed action was intended to clarify existing, long-standing policy with respect a contractor's tax treatment of floor coverings, lock and locking devices, and government contracts. In the event that the department decides to amend this regulation in the future, it will file a new action.

Agency Contact: Bland Sutton, Analyst, Department of Taxation, 600 East Main Street, Richmond, VA 23219, telephone (804) 371-2332, FAX (804) 371-2355, or email bland.sutton@tax.virginia.gov.

VA.R. Doc. No. R07-649; Filed January 31, 2023, 7:23 p.m.

Action Withdrawn

Title of Regulation: **23VAC10-210. Retail Sales and Use Tax (adding 23VAC10-210-141).**

Statutory Authority: § 58.1-203 of the Code of Virginia.

The Department of Taxation has WITHDRAWN the regulatory action for **23VAC10-210, Retail Sales and Use Tax,** which was published as a Notice of Intended Regulatory Action in 24:10 VA.R. 1256 January 21, 2008. This action is being withdrawn because the Department of Taxation started this action in 2008 but did not complete it. The purpose of the proposed action was intended to promulgate a new section, 23VAC10-210-144, to articulate the department's policy interpretation with respect to the exemption provided for the audiovisual production industry by § 58.1-609.6 of the Code of Virginia. In the event that the department decides to amend this regulation in the future, it will file a new action.

Agency Contact: Bland Sutton, Analyst, Department of Taxation, 600 East Main Street, Richmond, VA 23219, telephone (804) 371-2332, FAX (804) 371-2355, or email bland.sutton@tax.virginia.gov.

VA.R. Doc. No. R08-885; Filed January 31, 2023, 7:20 p.m.

Action Withdrawn

Title of Regulation: **23VAC10-210. Retail Sales and Use Tax (amending 23VAC10-210-3010).**

Statutory Authority: § 58.1-203 of the Code of Virginia.

The Department of Taxation has WITHDRAWN the regulatory action for **23VAC10-210, Retail Sales and Use Tax,** which was published as a Notice of Intended Regulatory Action in 24:10 VA.R. 1256 January 21, 2008. This action is being withdrawn because the Department of Taxation started this action in 2008 but did not complete it. The purpose of the proposed action was intended to amend 23VAC10-210-3010 to set forth legislative changes that provide an exemption to out-of-state advertising businesses on the purchase of printed materials from a Virginia printer that are stored in Virginia for 12 months or less for use out of state, and also to provide an exemption for sales of printing to Virginia advertising agencies for distribution out of state. In the event that the department decides to amend this regulation in the future, it will file a new action.

Agency Contact: Bland Sutton, Analyst, Department of Taxation, 600 East Main Street, Richmond, VA 23219,

telephone (804) 371-2332, FAX (804) 371-2355, or email bland.sutton@tax.virginia.gov.

VA.R. Doc. No. R08-888; Filed January 31, 2023, 7:23 p.m.

Action Withdrawn

Title of Regulation: **23VAC10-210. Retail Sales and Use Tax (amending 23VAC10-210-610).**

Statutory Authority: § 58.1-203 of the Code of Virginia.

The Department of Taxation has WITHDRAWN the regulatory action for **23VAC10-210, Retail Sales and Use Tax,** which was published as a Notice of Intended Regulatory Action in 24:10 VA.R. 1256 January 21, 2008. This action is being withdrawn because the Department of Taxation started this action in 2008 but did not complete it. The purpose of the proposed action was intended to amend 23VAC10-210-610 to provide clarification with respect to the application of the tax to florists, landscape contractors, and nurserymen. In the event that the department decides to amend this regulation in the future, it will file a new action.

Agency Contact: Jennifer Lewis, Analyst, Department of Taxation, 600 East Main Street, Richmond, VA 23219, telephone (804) 371-2341, FAX (804) 371-2355, or email jennifer.lewis@tax.virginia.gov.

VA.R. Doc. No. R08-912; Filed January 31, 2023, 7:24 p.m.

TITLE 24. TRANSPORTATION AND MOTOR VEHICLES

VIRGINIA AVIATION BOARD

Notice of Extension of Emergency Regulation

Title of Regulation: **24VAC5-20. Regulations Governing the Licensing and Operation of Airports and Aircraft and Obstructions to Airspace in the Commonwealth of Virginia (amending 24VAC5-20-10; adding 24VAC5-20-410 through 24VAC5-20-450).**

Statutory Authority: §§ 5.1-2.2 and 5.1-2.15 of the Code of Virginia.

The Governor has approved the request of the Virginia Aviation Board to extend the expiration date of the emergency regulation for 24VAC5-20 for six months as provided for in § 2.2-4011 D of the Code of Virginia. Therefore, the emergency regulation is continued in effect through August 11, 2023. This extension is required for the Virginia Aviation Board to continue to authorize localities and other political subdivisions to adopt local regulations for the take-off and landing of unmanned aircraft on properties owned by the locality or other political subdivision. The proposed regulation is awaiting Governor's Office approval. The emergency regulation was published in 38:1 VA.R. 163-166 August 13, 2021.

Effective Date Extended Through: August 11, 2023.

Agency Contact: Stephen Smiley, Senior Aviation Planner, Virginia Aviation Board, 5702 Gulfstream Road, Richmond, VA 23250, telephone (804) 236-3627, FAX (804) 236-3635, or email stephen.smiley@doav.virginia.gov.

VA.R. Doc. No. R21-6599; Filed February 14, 2023, 2:00 p.m.

GUIDANCE DOCUMENTS

PUBLIC COMMENT OPPORTUNITY

Pursuant to § 2.2-4002.1 of the Code of Virginia, a certified guidance document is subject to a 30-day public comment period after publication in the Virginia Register of Regulations and prior to the guidance document's effective date. During the public comment period, comments may be made through the Virginia Regulatory Town Hall website (http://www.townhall.virginia.gov) or sent to the agency contact. Under subsection C of § 2.2-4002.1, the effective date of the guidance document may be delayed for an additional period. The guidance document may also be withdrawn.

The following guidance documents have been submitted for publication by the listed agencies for a public comment period. Online users of this issue of the Virginia Register of Regulations may click on the name of a guidance document to access it. Guidance documents are also available on the Virginia Regulatory Town Hall (http://www.townhall.virginia.gov) or from the agency contact or may be viewed at the Office of the Registrar of Regulations, 900 East Main Street, Richmond, Virginia 23219.

BOARD OF ACCOUNTANCY

Title of Document: Virginia Board of Accountancy Policy 9 - Inactive Status Procedure for Approval, Denial, Appeal.

Public Comment Deadline: March 29, 2023.

Effective Date: March 30, 2023.

Agency Contact: Vasa Clarke, Regulatory Coordinator, Virginia Board of Accountancy, 9960 Mayland Drive, Suite 402, Henrico, VA 23233, email vasa.clarke@boa.virginia.gov.

STATE BOARD OF HEALTH

Titles of Documents: Office of Drinking Water Field Operations Manual.

Policy on Administration of the Equitable Access to Drinking Water Fund.

Public Comment Deadline: March 29, 2023.

Effective Date: March 30, 2023.

Agency Contact: Grant Kronenberg, Director of Compliance and Enforcement, Office of Drinking Water, Virginia Department of Health, 109 Governor Street, 6th Floor, Richmond, VA 23219, telephone (804) 629-0989, or email grant.kronenberg@vdh.virginia.gov.

DEPARTMENT OF MEDICAL ASSISTANCE SERVICES

Title of Document: Hospital Providers to Submit Requests for Non-Resident Alien Emergency Inpatient Admissions to Kepro for Service Authorization.

Public Comment Deadline: March 29, 2023.

Effective Date: March 30, 2023.

Agency Contact: Meredith Lee, Policy, Regulations, and Manuals Supervisor, Department of Medical Assistance Services, 600 East Broad Street, Suite 1300, Richmond, VA 23219, telephone (804) 371-0552, or email meredith.lee@dmas.virginia.gov.

STATE BOARD OF SOCIAL SERVICES

Title of Document: Division of Child Support Enforcement Program Manual.

Public Comment Deadline: March 29, 2023.

Effective Date: March 30, 2023.

Agency Contact: Karin Clark, Regulatory Coordinator, Department of Social Services, 801 East Main Street, Room 1507, Richmond, VA 23219, telephone (804) 726-7017, or email karin.clark@dss.virginia.gov.

COMMONWEALTH TRANSPORTATION BOARD

Titles of Documents: Land Development Inspection and Documentation Manual.

Manual for the Procurement and Management of Professional Services.

Office of Land Use Guide to Highway System Changes.

Public Comment Deadline: March 29, 2023.

Effective Date: March 30, 2023.

Agency Contact: Jo Anne P. Maxwell, Regulatory Coordinator, Policy Division, Department of Transportation, 1401 East Broad Street, Richmond, VA 23219, telephone (804) 786-1830, or email joanne.maxwell@vdot.virginia.gov.

STATE BOARD OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

Proposed Variances to the Regulations to Assure the Rights of Individuals Receiving Services from Providers Licensed, Funded, or Operated by the Department of Behavioral Health and Developmental Services

Notice of action: The Department of Behavioral Health and Developmental Services (DBHDS), in accordance with Part VI, Variances (12VAC35-115-220), of the Regulations to Assure the Rights of Individuals Receiving Services from Providers Licensed, Funded, or Operated by the Department of Behavioral Health and Developmental Services (12VAC35-115), hereafter referred to as the "Human Rights Regulations," is announcing an opportunity for public comment on an application for proposed variances to the Human Rights Regulations submitted to the State Human Rights Committee (SHRC). The purpose of the regulations is to ensure and protect the legal and human rights of individuals receiving services in facilities or programs operated, licensed, or funded by DBHDS.

Each variance application references the specific part of these regulations to which a variance is needed, the proposed wording of the substitute rule or procedure, and the justification for a variance. Such application also describes time limits and other conditions for duration and the circumstances that will end the applicability of the variance. After considering all available information, including comments, the SHRC intends to submit a written decision deferring, disapproving, modifying, or approving each variance application. All variances shall be approved for a specific time period. The decision and reasons for variance will be published in a later issue of the Virginia Register of Regulations.

Purpose of notice: The SHRC is seeking comment on the application for a proposed new variance to the Human Rights Regulations for Western State Hospital.

Variance is requested to the following section:

12VAC35-115-50: Dignity. Specifically, 12VAC35-115-50 C 6 a, which states, "An individual's access to mail may be limited only if the provider has reasonable cause to believe that the mail contains illegal material or anything dangerous. If so, the director or his designee may open the mail, but not read it, in the presence of the individual."

Explanation: Contraband is an ongoing issue at Western State Hospital, and patients can be sent anything in the mail. Envelopes could contain unsafe objects, and packages may include items that could be used to harm staff or inflict self-harm. Western State Hospital feel that by opening all patient mail well inside the nursing station, and away from the door, while in full view of surveillance cameras, this still allows patients to confirm what is in the mail while preserving staff ability to safely and promptly intervene if there is contraband. Western State Hospital staff would not open the mail, including letters, without patients being present and in full view of the opening. Western State Hospital will also make sure that when opening letters, no confidential information will be read. Opening the letters will only establish that there is no contraband contained within the letters.

This request was prompted by a recent incident that highlighted serious potential risks. As such, Western State Hospital obtained approval from the DBHDS Commissioner, State Human Rights Director, and SHRC Chair in accordance with 12VAC35-115-220, to implement this request as a temporary variance pending approval pursuant to the full application process. The temporary variance was implemented December 16, 2022.

How to comment: The SHRC accepts written comments by email, fax, and postal mail. In order to be considered, comments must include the full name, address, and telephone number of the person commenting and be received by DBHDS by the last day of the comment period. DBHDS will provide the comments to the SHRC. All information received is part of the public record.

To review a proposal: Variance applications and any supporting documentation may be obtained by contacting the DBHDS representative listed in this notice.

Contact Information: Taneika Goldman, Director, Office of Human Rights, Department of Behavioral Health and Developmental Services, 1220 East Bank Street, P.O. Box 1797, Richmond, VA 23218-1797, telephone (804) 786-3988, FAX (833) 734-1241, or email taneika.goldman@dbhds.virginia.gov.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Proposed Amended Consent Order for the BVU Authority - City of Bristol and Washington County

An amended enforcement action has been proposed for the BVU Authority for violations of the State Water Control Law in the City of Bristol and Washington County, Virginia. The proposed amendment to the order by consent is available at the Department of Environmental Quality office listed or online at www.deq.virginia.gov. The staff contact person will accept comments by email or postal mail from February 27, 2023, through March 29, 2023.

Contact Information: Jonathan Chapman, Enforcement Specialist, Department of Environmental Quality, Southwest Regional Office, 355-A Deadmore Street, Abingdon, VA 24210, or email jonathan.chapman@deq.virginia.gov.

Proposed Consent Order for Fiberlight LLC and Reel Broadband LLC - City of Charlottesville

An enforcement action has been proposed for Fiberlight LLC and Reel Broadband LLC for violations of State Water Control Law and regulations in the City of Charlottesville and Albemarle, Culpeper, Fauquier, Loudoun, and Prince William Counties, Virginia. The proposed consent order is available from the Department of Environmental Quality (DEQ) contact or at https://www.deq.virginia.gov/permits-regulations/public-notices/enforcement-orders. The DEQ contact will accept written comments from February 27, 2023, through March 29, 2023.

Contact Information: Kristen Sadtler, Department of Environmental Quality, 1111 East Main Street, Richmond, VA 23219, email kristen.sadtler@deq.virginia.gov.

Proposed Consent Order for Northern Virginia Baptist Center - Prince William County

An enforcement action has been proposed for the Northern Virginia Baptist Center to amend a consent order previously issued for violations of State Water Control Law and regulations at the Northern Virginia Baptist Center located in Prince William County, Virginia. The proposed consent order amendment is available from the Department of Environmental Quality (DEQ) contact or at www.deq.virginia.gov/permits-regulations/public-notices. The DEQ contact will accept written comments from February 28, 2023, through March 29, 2023.

Contact Information: Jim Datko, Department of Environmental Quality, Northern Regional Office, 13901 Crown Court, Woodbridge, VA 22193, or email james.datko@deq.virgnia.gov.

Intent to Approve Revised Advance Credit Fee Schedules in Several River Basins for Use by the Virginia Aquatic Resources Trust Fund (VARTF)

Pursuant to 9VAC25-210-116 D, the Department of Environmental Quality is giving notice of its intent to approve revised advance credit fee schedules in several river basins for use by the Virginia Aquatic Resources Trust Fund (VARTF). VARTF is an approved in-lieu fee mitigation program (ILF Program), sponsored and operated by The Nature Conservancy (sponsor). This public notice is specific to the sponsor's 2023 request to increase their fee schedule in several basins, based on rising costs of existing VARTF projects and recent bids on mitigation related activities and credit purchases.

The department intends to approve the 2023 revised fee schedules. State regulation specifies that an ILF Program must have a "mechanism to establish fee amounts that will ensure each contribution will be adequate to compensate for the wetland acreage and functions or stream functions and water quality benefits lost in the impacted watershed." In the provided "VARTF Advance Credit Fee Schedule" document, VARTF describes the circumstances leading to the requested 2023 revised fee schedules in each river basin.

A copy of this public notice and the VARTF 2023 revised fee schedules will be available on February 27, 2023, on the DEQ website Wetlands and Streams Public Notice page, under the Permits and Regulatory section at https://www.deq.virginia.gov/permits-regulations/public-notices/water/wetlands-streams.

Statutory Authority: § 62.1-44.15:20-23 of the Code of Virginia; 9VAC25-210-116 D of the Virginia Administrative Code.

Public Comment Deadline: March 29, 2023.

Contact Information: Dave Davis, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, VA 23218, telephone (804) 698-4105, FAX (804) 698-4178, or email vwppublicnotices@deq.virginia.gov.

Availability of the 2023 Annual Monitoring Plan

Purpose of notice: The Virginia Department of Environmental Quality (DEQ) is announcing the availability of the 2023 Water Quality Monitoring Plan (MonPlan). The 2023 MonPlan is available on the agency's website at https://www.deq.virginia.gov/water/water-quality/monitoring/water-quality-monitoring-plan.

An interactive map of the 2023 monitoring plan stations will be posted in mid-February through DEQ's online GIS map viewer at https://apps.deq.virginia.gov/EDM/.

Background: Every year, DEQ staff from the agency's six regional offices collect water samples for testing from more than 1,500 locations across the Commonwealth. The agency's various monitoring activities for each calendar year are outlined in the annual statewide MonPlan.

2023 MONPLAN: The 2023 MonPlan summarizes DEQ's water quality monitoring activities to be conducted from January 1 through December 31, and is developed for the purpose of implementing the goals and objectives of DEQ's Water Quality Monitoring Strategy. This water quality information is presented in compliance with the Virginia Water Quality Monitoring, Information and Restoration Act (§ 62.1-44.19:5 of the Code of Virginia) to help ensure public awareness of water quality issues and conditions. The 2023 MonPlan contains detailed information on DEQ's monitoring activities, including the station locations, specific conditions, frequency of monitoring, and costs.

Contacts for more information: Requests for more information on the 2023 MonPlan can be directed to Roger Stewart at (804) 659-1384 or roger.stewart@deq.virginia.gov. Additional information is also available on DEQ's Water Quality

Monitoring website at https://www.deq.virginia.gov/water/water-quality/monitoring.

Citizen Nominations for the 2024 Monplan: Citizens can nominate portions of lakes, streams, and rivers of Virginia for water quality monitoring by DEQ. Nominations received on or before April 30, 2023, will be considered for inclusion in DEQ's 2024 MonPlan. More information on the citizen nomination process is available on DEQ's Citizen Monitoring website at https://www.deq.virginia.gov/water/water-quality/monitoring/citizen-monitoring. Contact Meighan Wisswell at telephone (571) 866-6494 or citizenwater@deq.virginia.gov for more information.

Contact Information: Roger Stewart, Department of Environmental Quality, 1111 East Main Street, Suite 1400, Richmond, VA 23218, telephone (804) 659-1384, FAX (804) 698-4178, or email roger.stewart@deq.virginia.gov.

Woodridge Solar Project Notice of Intent for Small Renewable Energy Project (Solar) - Albemarle County

Woodridge Solar LLC has provided the Department of Environmental Quality a notice of intent to submit the necessary documents for a permit by rule for a small renewable energy project (solar) in Albemarle County. Woodridge Solar will be located along Secretarys Road near Woodridge. Latitude and longitude coordinates are 37.882386, -78.47275. The proposed project is an approximately 138-megawatt alternating current photovoltaic ground-mounted solar facility. Woodridge Solar will be sited on approximately 600 acres across a larger collection of parcels approximately comprising 2,300 acres. The project conceptually consists of approximately 330,000 545-watt modules paired with 45 3.43-mVA inverters.

Contact Information: Susan Tripp, Renewable Energy Permit by Rule Coordinator, Department of Environmental Quality, 1111 East Main Street, Richmond, VA 23219, telephone (804) 664-3470, FAX (804) 698-4178, or email susan.tripp@deq.virginia.gov.

DEPARTMENT OF GENERAL SERVICES

Request for Comments on Revision to Fees for Drinking Water Certification

Purpose of notice and background information: The Division of Consolidated Laboratory Services (DCLS) is seeking comment on the revision to fees charged for certifying drinking water laboratories under 1VAC30-41-270 to be effective May 1, 2023, through April 30, 2024.

1VAC30-41-270 I 2 requires DCLS to increase or decrease annually the fees charged for certifying drinking water laboratories using the Consumer Price Index-Urban percentage change, average to average for the previous calendar year published by the U.S. Bureau of Labor Statistics in January. The percentage change, average to average for 2022 is an additional 8.0%. See the table labeled "Historical Consumer Price Index for All Urban Consumers (CPI-U): U.S. city average, all items, index averages" at https://www.bls.gov/cpi/tables/supplemental-files/historical-cpi-u-202212.pdf.

The revised fees are exempt from the requirements of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia). The Budget of the Commonwealth of Virginia (Chapter 2 of the 2022 Acts of Assembly, Special Session I) in Part I, Item 80, at C 3 a requires DCLS to provide notice and an opportunity to submit written comments on the revised fees.

The notice of fees for May 1, 2023, through April 30, 2024, will be published on the DCLS drinking water laboratory certification webpage after consideration of submitted comments.

Public comment period: February 27, 2023, through March 28, 2023.

How to comment: DCLS accepts written comments by email, fax, and postal mail. In order to be considered, comments must include the full name, address, and telephone number of the person commenting and be received by DCLS by the last day of the comment period. All materials received are part of the public record. Email comments should be sent to rhonda.bishton@dgs.virginia.gov. The number for faxed comments is (804) 371-8305. Written comments should be sent to Rhonda Bishton, Regulatory Coordinator, Department of General Services, Attn: DCLS DW Fee Comments, 1100 Bank Street, Richmond, VA, 23219.

NOTICE OF FEES FOR MAY 1, 2023 THROUGH APRIL 30, 2024

DCLS requests comments on the revised fees in the notice below.

TESTING CATEGORY	FEE ($)
Microbiological testing	
1 - 2 methods	754
3 - 5 methods	879
6+ methods	1005
Inorganic chemistry, nonmetals testing	
1 - 2 methods	816
3 - 5 methods	1065
6 - 8 methods	1319

9+ methods	1568
Inorganic chemistry, metals testing	
1 - 2 methods	1254
3 - 5 methods	1506
6+ methods	1754
Organic chemistry	
1 - 2 methods	1319
3 - 5 methods	1568
6 - 8 methods	1819
9+ methods	2071
Radiochemistry	
1 - 2 methods	1380
3 - 5 methods	1631
6+ methods	1882
Asbestos	
1 - 2 methods	1129
3 - 5 methods	1380
6+ methods	1631

HOW FEES ARE CALCULATED

DCLS calculates a laboratory's total fee by adding the fees for the number of test methods in each category in the fee table for which the laboratory is certified or applies to be certified. Contact lab_cert@dgs.virginia.gov for more information about the fee category for a specific method.

ADDITIONAL FEES

Additional fees apply when a laboratory:

Applies for modification of certification under 1VAC30-41-110.

Is moving its location when the move requires DCLS to perform an onsite assessment.

Requests reinstatement of certification when DCLS requires an onsite assessment.

Hourly review fee and calculation of total fee: The fee to be charged is the sum of the total hourly charges for all reviewers plus any onsite assessment costs incurred. The hourly charge per reviewer is $77. The charge per reviewer is determined by multiplying the number of hours expended in the review by $77.

Onsite review and travel expenses: If an onsite review is required, travel time and onsite review time will be charged at the same hourly rate of $77 and any travel expenses will be added.

WHEN TO PAY

Payment is due at the time the application is made or annually thereafter upon receipt of the invoice from DCLS. Annual billing precedes the expiration of the current certificate.

HOW TO PAY

Fees may be paid by check, draft, or postal money order payable to the Treasurer, Commonwealth of Virginia, or submitted electronically, if available. Payment must be in United States currency, except that agencies and institutions of the Commonwealth of Virginia may submit interagency transfers for the amount of the fee. Laboratories may also pay fees using credit cards. All fees must be sent to the following address, or submitted electronically, if available: DCLS, Attn: Lab Certification, 600 North 5th Street, Richmond, VA 23219. A fee payment form is available on the Drinking Water page of the DCLS website at www.dgs.virginia.gov/dcls.

Contact Information: Rhonda Bishton, Executive Administrative Assistant, 1100 Bank Street, Suite 420, Richmond, VA 23219, telephone (804) 786-3311, FAX (804) 371-8305.

DEPARTMENT OF MEDICAL ASSISTANCE SERVICES

Draft Addiction and Recovery Treatment Services Provider Manual Chapter V

The draft Addiction and Recovery Treatment Services Provider Manual Chapter V is now available on the Department of Medical Assistance Services website at https://www.dmas.virginia.gov/for-providers/general-information/medicaid-provider-manual-drafts/.

Contact Information: Emily McClellan, Regulatory Manager, Division of Policy and Research, Department of Medical Assistance Services, 600 East Broad Street, Suite 1300, Richmond, VA 23219, telephone (804) 371-4300, FAX (804) 786-1680.

Draft CCC Plus Waiver Provider Manual Chapter V

The draft CCC Plus Waiver Provider Manual Chapter V is now available on the Department of Medical Assistance Services website at https://www.dmas.virginia.gov/for-providers/

general-information/medicaid-provider-manual-drafts/ for public comment until March 1, 2023.

Contact Information: Emily McClellan, Regulatory Manager, Division of Policy and Research, Department of Medical Assistance Services, 600 East Broad Street, Suite 1300, Richmond, VA 23219, telephone (804) 371-4300, FAX (804) 786-1680.

Draft Hospital Provider Manual Appendix E

The draft Hospital Provider Manual Appendix E is now available on the Department of Medical Assistance Services website at https://www.dmas.virginia.gov/for-providers/general-information/medicaid-provider-manual-drafts/ for public comment until March 10, 2023.

Contact Information: Meredith Lee, Policy, Regulations, and Manuals Supervisor, Department of Medical Assistance Services, 600 East Broad Street, Suite 1300, Richmond, VA 23219, telephone (804) 371-0552, FAX (804) 786-1680, TDD (800) 343-0634, or email meredith.lee@dmas.virginia.gov.

STATE WATER CONTROL BOARD

Opportunity for Public Comment Period and Public Hearing on the Draft Virginia Erosion and Stormwater Management Regulation

Introduction: Chapters 68 and 758 of the 2016 Acts of Assembly combine the Department of Environmental Quality's (DEQ) existing statutory programs relating to soil erosion and sediment control and stormwater management. The ninth enactment directs the State Water Control Board to adopt regulations to carry out the purposes of the Chapters 68 and 758.

In accordance with the ninth enactment, DEQ provided a Notice of Intended Regulatory Action (35:12 VA.R. 1399 February 4, 2019), formed a 25-member stakeholders advisory group to assist in the development of the regulation, and held seven public meetings with the advisory group between June 18, 2019, and September 13, 2022. Through the stakeholder engagement process, DEQ has developed draft regulations to satisfy the requirements of Chapters 68 and 758. The purpose of this general notice is to invite the public to review and comment on the draft regulations before they are presented to the board for adoption.

Development of Draft Regulation: The draft Virginia Erosion and Stormwater Management Regulation (9VAC25-875) consolidates requirements of the current Erosion and Sediment Control Regulations (9VAC25-840); Erosion and Sediment Control and Stormwater Certification Regulations (9VAC25-850); and Virginia Stormwater Management Program (VSMP) Regulation (9VAC25-870) into one chapter of the Virginia Administrative Code. Through consolidation of the three chapters, the new regulation clarifies program requirements, eliminates redundancies, and corrects inconsistencies between erosion and sediment control regulations and stormwater management plan regulations. No substantive changes to existing erosion and sediment control minimum standards or to the post-construction stormwater management technical criteria are part of this regulatory action.

In conjunction with the creation of the Virginia Erosion and Stormwater Management Regulation, the board intends to repeal the Erosion and Sediment Control Regulation (9VAC25-840); Erosion and Sediment Control and Stormwater Certification Regulation (9VAC25-850); and Virginia Stormwater Management Program Regulation (9VAC25-870) in their entirety. Additionally, in response to the creation of Chapter 875 (and the repeal of Chapters 840, 850, and 870), citations and references in Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830); General VPDES Permit for Discharges of Stormwater from Construction Activities (9VAC25-880); and General VPDES Permit for Discharger of Stormwater from Small Municipal Separate Storm Sewer Systems (9VAC25-890) are being revised to reference the new Chapter 875 citations.

DEQ seeks public comment on the draft Virginia Erosion and Stormwater Management Regulation prior to presenting the regulation to the board for final adoption. DEQ will prepare a written summary of comments received on the draft regulation and the agency's responses prior to presenting the regulation to the board for adoption.

The ninth enactment exempts the regulations that are adopted to implement Chapters 68 and 758 from the requirements of Article 2 (§ 2.2-4006 et seq.) of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).

The draft regulatory language for public comment and additional information is available from the DEQ website at https://www.deq.virginia.gov/water/stormwater.

Public Hearing: In accordance with the Notice of Intended Regulatory Action (35:12 VA.R. 1399 February 4, 2019), DEQ will hold a hearing at 10 a.m. on Wednesday, March 15, 2023, Bank of America Building, 3rd Floor Conference Room, 1111 East Main Street, Richmond, Virginia 23219.

Public Comment Period: February 8, 2023, to April 10, 2023.

How to Comment: Anyone wishing to submit comments may do so through the Public Comment Forums feature of the Virginia Regulatory Town Hall at https://townhall.virginia.gov. Members of the public may also submit comments by mail, email, or fax to the contact listed at the end of this notice.

DEQ will accept written and oral comments at the public hearing. All comments must be received by DEQ during the comment period. Written comments must include the name,

organization represented (if any), mailing address or email address, and telephone number of the commenter.

Contact Information: Scott Van Der Hyde, Regulatory Analyst, P.O. Box 1105, Richmond, VA 23218, or hand delivery to Department of Environmental Quality, 1111 East Main Street, Suite 1400, Richmond, VA 23219, telephone (804) 659-1541, FAX (804) 698-4178, or email scott.vanderhyde@deq.virginia.gov.

VIRGINIA CODE COMMISSION

Notice to State Agencies

Contact Information: *Mailing Address:* Virginia Code Commission, Pocahontas Building, 900 East Main Street, 8th Floor, Richmond, VA 23219; *Telephone:* (804) 698-1810; *Email:* varegs@dls.virginia.gov.

Meeting Notices: Section 2.2-3707 C of the Code of Virginia requires state agencies to post meeting notices on their websites and on the Commonwealth Calendar at https://commonwealthcalendar.virginia.gov.

Cumulative Table of Virginia Administrative Code Sections Adopted, Amended, or Repealed: A table listing regulation sections that have been amended, added, or repealed in the *Virginia Register of Regulations* since the regulations were originally published or last supplemented in the print version of the Virginia Administrative Code is available at http://register.dls.virginia.gov/documents/cumultab.pdf.

Filing Material for Publication in the *Virginia Register of Regulations:* Agencies use the Regulation Information System (RIS) to file regulations and related items for publication in the *Virginia Register of Regulations*. The Registrar's office works closely with the Department of Planning and Budget (DPB) to coordinate the system with the Virginia Regulatory Town Hall. RIS and Town Hall complement and enhance one another by sharing pertinent regulatory information.

ERRATA

STATE BOARD OF BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

Title of Regulation: **12VAC35-105. Rules and Regulations for Licensing Providers by the Department of Behavioral Health and Developmental Services.**

Publication: 39:11 VA.R. 1376-1390 January 16, 2023.

Correction to Final Regulation:

Page 1386, 12VAC35-105-30 B, 2nd column,

line 2, after "~~2.~~" replace "~~Community gero-psychiatric residential;~~ 3. ICF/IID" with "[3." Community gero-psychiatric residential]"

line 3, after "4." insert "[" and strike "Community intermediate care facility-MR;" and insert "] ICF/IID;"

after "26." insert "[" and strike "Substance abuse residential treatment for women with children;"

beginning of next line, strike "27." and insert "]"

VA.R. Doc. No. R21-6076; Filed February 8, 2023, 9:10 a.m.

BOARD OF NURSING

Title of Regulation: **18VAC90-26. Regulations for Nurse Aide Education Programs.**

Publication: 39:12 VA.R. 1503-1509 January 30, 2023.

Correction to Fast-Track Regulation:

Page 1508, 18VAC90-26-30 C, add "2." before "The primary instructor shall:"

VA.R. Doc. No. R20-7116; Filed February 10, 2023, 2:03 p.m.

Errata