

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

Amusement Device Technical Advisory Committee (ADTAC)

Meeting – November 18, 2025 – 10:00 a.m.

**Virginia Housing Center
4224 Cox Road Glen Allen, Virginia 23260**

AGENDA

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VIRGINIA AMUSEMENT DEVICE TECHINCAL ADVISORY COMMITTEE

Casey Littlefield, Chair
(representing building officials)

Danny Abner
(representing third party inspectors)

Jeff Brubaker
(representing operators)

Michael Dellinger
(representing building officials)

Brian Rath
(representing operators)

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT

Amusement Device Technical Advisory Committee

Summary Minutes of the August 28, 2025 Meeting – Virginia Housing Center

Committee members present: Danny Abner, Michael Dellinger, Casey Littlefield (Chair), and Brian Rath.

DHCD Staff present: Jeff Brown, Florin Moldovan, and Travis Luter

Others present: Mike Eutsey and Ken Martin

Chair Littlefield called the meeting to order at approximately 10:00 a.m.

Secretary Luter called the roll and informed the Chair a quorum was present.

Chair Littlefield opened the floor for the first item on the agenda, approval of the January 27, 2022 meeting minutes. The draft minutes of the January 27, 2022 meeting in the ADTAC members' agenda package were considered. Mr. Dellinger moved to approve the minutes as presented. The motion was seconded by Mr. Abner and passed unanimously.

Chair Littlefield then acknowledged Florin Moldovan, SBCO Director, to provide an update on the 2024 code development cycle. Mr. Moldovan provided an overview of the code development process. He then provided an update on the 2024 code development cycle such as calendar of meetings, submittal deadlines, etc.

Chair Littlefield then opened the floor for discussion of the next agenda item concerning updating the referenced standards in the VADR. Mr. Moldovan provided an overview of how the referenced standards were researched and reviewed and suggested updating the VADR referenced standards to the newest edition of the standard. Mr. Rath moved to approve updating the standards in the 2024 VADR to the newest edition as presented. The motion was seconded by Mr. Dellinger and passed unanimously.

Chair Littlefield then opened the floor for discussion of the next agenda item concerning code change proposal AD20-24. Mr. Rath moved to support the code change proposal as written. The motion was seconded by Mr. Abner and failed unanimously because the definition did not line up with the ASTM standard and introduced the definition for a term that did not appear anywhere in the VADR. Mr. Dellinger made a motion not to support the code change proposal as written because it did not follow the definition provided in the ASTM standard and introduced the definition for a term that did not appear anywhere in the VADR. The motion was seconded by Mr. Abner and passed unanimously.

Note: Chair Littlefield agreed to contact the proponent of code change AD20-24 and discuss approaching the code change from the fee schedule prospective.

Chair Littlefield then opened the floor for discussion of the next agenda item concerning other potential changes to the 2024 VADR.

- Mr. Abner initiated a discussion related to the required spacing of 75' for fire extinguishers.
- Mr. Abner also initiated a discussion related to the need for third party inspectors to have errors and omissions insurance as well as the amount of insurance to be required.
- Mr. Abner also initiated a discussion about the need for inspectors to have the owner's manual on hand for amusement devices when performing inspections.
- Mr. Dellinger initiated a discussion on reviewing all VADR definitions to ensure they match ASTM Standard F747-24 and to remove those no longer necessary. Mr. Dellinger agreed to lead that review and potential code change proposal for the 2027 code development cycle.

After a brief discussion of the committee members present, the secretary was directed to schedule the next meeting for early spring.

There being no other business, the meeting was adjourned at approximately 11:45 a.m.

AD40-24

VRC: 13VAC5-31-40.

Proponents: DHCD staff on behalf of the Amusement Device Technical Advisory Committee (ADTAC); (sbco@dhcd.virginia.gov)

2021 Virginia Building and Fire Code Related Regulations

Revise as follows:

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 No. B77.1-2017 B77.1-2022 for the regulation of passenger tramways; and
 2. American Society for Testing and Materials (ASTM) Standard Nos. F747-21a, F747-24, F770-21a, F770-24, F1159-16e1, F1193-18a, F1193-25, F1957-99 (2017), F1957-24, F2007-18, F2007-24, F2137-19, F2291-19 F2291-21, F2291-25, F2374-21a, F2374-24, F2375-09 (2017), F2375-25, F2376-21a, F2376-24, F2460-19, F2461-20a, F2461-23, F2959-21, F2959-25a, F2960-16, F2960-23, F2970-20, F2970-22, F2974-20, F2974-24a and F3054-18 F3054-23 for the regulation of amusement devices.

The standards referenced 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
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- 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 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.

Reason Statement: The proposal is submitted by DHCD staff on behalf of the Amusement Device Technical Advisory Committee (ADTAC). Each time the Virginia Amusement Device Regulation (VADR) is updated, the ADTAC reviews the standards that are referenced in the existing VADR and determines if updates to the edition of the standards referenced in the VADR are appropriate. This proposal makes updates to the standards as recommended by the ADTAC at their August 28, 2025 meeting.

Cost Impact: The code change proposal will not increase or decrease the cost

The proposal does not increase or decrease the cost of construction.

AD40(1)-24

VRC: 13VAC5-31-40., 13VAC5-31-75.

Proponents: Victoria Baselice, representing Loudoun County Fire Marshal Office (victoria.baselice@loudoun.gov)

2021 Virginia Building and Fire Code Related Regulations

Revise as follows:

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 No. B77.1-2017 for the regulation of passenger tramways; and
 2. American Society for Testing and Materials (ASTM) Standard Nos. F747-21a, F770-21a, F1159-16e1, F1193-18a, F1957-99 (2017), F2007-18, F2137-19, F2291-19 F2291-21, F2374-21a, F2375-09 (2017), F2376-21a, F2460-19, F2461-20a, F2959-21, F2960-16, F2970-20, F2974-20, and F3054-18 for the regulation of amusement devices.

The standards referenced in subsection A of this section may be procured from:

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- 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. Pertaining to inflatable devices, the operator/attendant/supervisor shall have received training or instruction on the proper set up and operation or the inflatable.
 2. 3. 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. 4. The operator of an amusement device shall not be (i) under the influence of any drugs 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.

13VAC5-31-75. Local building department.

A. In accordance with §§ 36-98.3 and 36-105 of the Code of Virginia, the local building department shall be responsible for the enforcement of this chapter and may charge fees for such enforcement activity. The total amount charged for any one permit to operate an amusement device or devices or the renewal of such permit shall not exceed the following, except that when a private inspector is used by the owner or operator of the device, the fees shall be reduced by 75%:

1. \$55 for each small mechanical ride or inflatable amusement device covered by the permit;
2. \$75 for each circular ride, institutional trampoline, or flat-ride less than 20 feet in height covered by the permit, except concession go-karts.

Concession go-kart fees shall not exceed \$300 per track, for tracks with up to 20 karts. An additional fee of up to \$10 may be charged for each additional kart in excess of 20;

3. \$100 for each spectacular ride covered by the permit that cannot be inspected as a circular ride or flat-ride in subdivision 2 of this subsection due to complexity or height, except zip lines.

Zip line fees shall not exceed \$150 for each zip line. For the purpose of this section, each portion from launch point to landing point shall be considered a separate zip line and each zip line between a launch point and landing point shall also be considered a separate zip line;

4. \$200 for each coaster covered by the permit that exceeds 30 feet in height;
5. \$400 for each coaster covered by the permit that exceeds 60 feet in height; and
6. The local building department may charge an additional fee for permits and inspections of generators and associated wiring for amusement device events. Generators subject to these fees are those used exclusively with amusement devices and that are inspected by the local building department. The fee per event shall not exceed \$165 and shall not exceed the actual cost to perform the inspection or inspections.

Exception: Small portable generators serving only cord and plug connected equipment loads are not subject to the fee.

1. The wattage for any small generator shall not exceed 3500 watts. Small portable generators exceeding this wattage shall not be exempt.
2. Events with multiple generators exceeding three small portable generators (3500 watts each) and/or more than 10 gallons of gasoline in storage cans shall not be exempt.

Notwithstanding the fee limitations established in this section, the local building department shall be permitted to increase the fees up to 50% when requested to perform weekend or after-hour inspections. The local building department shall also be permitted to increase fees up to 50% when a reinspection is required.

B. Notwithstanding the provisions of subsection A of this section, when an amusement device is constructed in whole or in part at a site for permanent operation at that site and is not intended to be disassembled and moved to another site, then the local building department may utilize permit and inspection fees established pursuant to the USBC to defray the cost of enforcement. This authorization does not apply to an amusement device that is only being reassembled, undergoing a major modification at a site or being moved to a site for operation.

- C. A permit application shall be made to the local building department at least five thirty (30) days before the date in which the applicant intends to operate an amusement device. The application shall include the name of the owner, operator or other person assuming responsibility for the device, a general description of the device including any serial or identification numbers available, the location of the property on which the device will be operated, and the length of time of operation. The permit application shall indicate whether a private inspector will be used. If a private inspector is not used, the applicant shall give reasonable notice when an inspection is sought and may stipulate the day such inspection is requested provided it is during the normal operating hours of the local building department. In addition to the information required on the permit application, the applicant shall provide proof of liability insurance of an amount not less than \$1 million per occurrence or proof of equivalent financial responsibility. The local building department shall be notified of any change in the liability insurance or financial responsibility during the period covered by the permit.
- D. Generators shall be installed not less than 10 feet from combustible materials and isolated from the public. Generators must maintain a minimum distance of 20 feet from inflatables.
1. 2A:10BC Fire Extinguisher required within 75 ft of each generator in compliance with fire extinguisher requirements found in the Virginia Construction Code
- D. E. Notwithstanding the provisions of subsection C of this section, a permit application is not required for a small mechanical ride or an inflatable amusement device that has a certificate of inspection issued by any local building department in this Commonwealth either a six-month period for small mechanical rides or within a one-year period for inflatable amusement devices prior to the dates the small mechanical ride or inflatable amusement device is to be used, regardless of whether the device has been disassembled and moved to a new site. In such cases, the local building department shall be notified and provided with the information required on a permit application as listed in subsection C of this section at least three days prior to operation. In addition, and notwithstanding the provisions of subsection A of this section, the local building department shall be permitted to charge a \$50 inspection fee per event to the person notifying the local building department of an event where an inflatable amusement device is operating if the local building department chooses to inspect any or all of the inflatable amusement devices operating at that event. An inspection report shall be provided to the person notifying the local building department of the event if such an inspection is conducted. A permit application is required for small mechanical rides, and inflatable amusement devices regardless of prior inspection issued by any local building department in the Commonwealth.

E. E. Local building department personnel shall examine the permit application within five ~~thirty~~ (30) days and issue the permit if all requirements are met. A certificate of inspection for each amusement device shall be issued when the device has been found to comply with this chapter by a private inspector or by an inspector from the local building department. It shall be the responsibility of the local building department to verify that the private inspector possesses a valid certificate of competence as an amusement device inspector from the Virginia Board of Housing and Community Development. ~~In addition, local building department personnel shall be responsible for assuring that the certificate of inspection is posted or affixed on or in the vicinity of the device in a location visible to the public. Local building department personnel shall post or affix such certificates or permit the certificates to be posted or affixed by the private inspector. Permits shall indicate the length of time the device or devices will be operated at the site, clearly identify the device or devices to which it applies and the date of expiration of the permit. Permits shall not be valid for longer than one year, except that permits for small mechanical rides shall not be valid for longer than six months.~~

1. ~~The applicant must upload a manual for each device being used. If no manual is available, the applicant shall reference the state code to installation standards of inflatable devices. The manufacturer's operations manual must be obtained, kept on site and be followed for installation and operation. If the manual is not available, operations must comply with ASTM F2374, which covers design, manufacture, operation and maintenance of inflatable amusement devices. The regulations also detail safety requirements such as anchoring, operator presence wind speed limits and inspection guidelines.~~
2. ~~In the absence of an installation manual for inflatables, each anchor point on the inflatable shall be secured with no less than 150 pounds of weight per anchor point for non-staked applications or each anchor point shall be staked with no less than a $\frac{3}{4}$ inch steel stake driven into the ground no less than 18 inches at a 45 degree angle with the tip pointed toward the inflatable.~~
 - a) ~~The end/exposed remaining stake shall be blunted/protected to protect from injury.~~
 - b) ~~Tethers shall be securely attached to the anchor points (weights/stakes)~~
3. ~~If the owner's manual is available and includes instructions about a tarp being required to protect the bottom of the inflatable, those instructions must be followed and the tarp used accordingly.~~
4. ~~In the absence of an installation manual the inflatable shall not be operated or inflated during wind speeds in excess of 15mph.~~
5. ~~Failure to comply with this regulation or owner's manual requirements shall result in the ride/inflatable not being approved for use.~~

G. ~~In addition, local building department personnel shall be responsible for assuring that the certificate of inspection is posted or affixed on or in the vicinity of the device in a location visible to the public. Local building department personnel shall post or affix such certificates or permit the certificates to be posted or affixed by the private inspector. Permits shall indicate the length of time the device or devices will be operated at the site, clearly identify the device or devices to which it applies and the date of expiration of the permit. Permits shall not be valid for longer than one year, except that permits for small mechanical rides shall not be valid for longer than six months.~~

F.H. In addition to obtaining a certificate of inspection in conjunction with a permit application for amusement devices permanently fixed to a site, a new certificate of inspection shall also be obtained prior to the operation of an amusement device following a major modification, prior to each seasonal operation of a device, at least once during the operating season and prior to resuming the operation of a device following an order from a local building department to cease operation. This requirement shall not apply to small mechanical rides meeting the conditions outlined in subsection D of this section.

G. I. For amusement devices manufactured prior to 1978, the owner or operator shall have the information required by 10.1 through 10.6 of ASTM F1193 available at the time of inspection. In addition, the operator of any amusement device shall be responsible for obtaining all manufacturer's notifications, service bulletins and safety alerts issued pursuant to ASTM F770 and the operator shall comply with all recommendations and requirements set out in those documents. A copy of all such documents shall be made available during an inspection.

- H. J. In the enforcement of this chapter, local building department personnel shall have authority to conduct inspections at any time an amusement device would normally be open for operation or at any other time if permission is granted by the owner or operator, to issue an order to temporarily cease operation of an amusement device upon the determination that the device may be unsafe or may otherwise endanger the public and to accept and approve or deny requests for modifications of the rules of this chapter in accordance with the modification provisions of the USBC.
- I.K. 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 under this chapter 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.
- J.L. In accordance with § 36-98.3 of the Code of Virginia and 13VAC5-31-10 B, the procedures for violations of this chapter shall be as prescribed in the USBC.
- K. M. In accordance with § 36-98.1 of the Code of Virginia, the Virginia Department of General Services (DGS) shall function as the local building department for the application of this chapter to amusement devices located on state-owned property. In accordance with § 36-98.2 and 36-114 of the Code of Virginia, appeals of the application of this chapter by the DGS shall be made directly to the State Building Code Technical Review Board. Further, as a condition of this chapter, such appeals shall be filed within 14 calendar days after receipt of the decision of DGS.

Reason Statement:

Due to recently developing issues and ongoing compliance problems with vendors setting up primarily inflatable amusement devices, this code change is proposed in the best interest of all parties involved — the property owners, vendors, customers, and the inspectors tasked with ensuring safety and compliance.

In 2025, Loudoun County has permitted and stickered approximately 750 amusement devices. This increase followed the transfer of the amusement device inspection function from the Building Department to the Fire Marshal's Office. With the Fire Marshal's Office operating as part of a 24-hour emergency response agency, inspections have been made available during evenings and weekends where they were previously unavailable.

These extended inspection hours have revealed a growing number of questionable and unsafe installation practices, including: missing installation or operation manuals, lack of on-site attendants, improper staking and tethering, trip and impalement hazards, frayed or damaged power cords, leaking generators, missing, insufficiently charged, or out-of-date fire extinguishers, overloaded generators, and excessive quantities of gasoline on site.

Inspectors are increasingly finding themselves in disputes with vendors because the current code language is vague and ambiguous, leaving many questions unanswered. While some manufacturer installation manuals provide sufficient direction, many do not. The proposed changes are intended to establish clear, enforceable requirements that promote safe operation, reduce ambiguity, and eliminate unnecessary confrontations between inspectors and vendors. These clarifications will also assist end users who rent these devices, helping to ensure their installations can be approved without last-minute compliance issues related to inadequate anchoring or other deficiencies.

13VAC5-31-40. Incorporated standards.

- Rationale: It is the intent of this change to have the vendor provide training or guidance to personnel that will be in attendance overseeing use of this device. A manual on site will ensure operator/attendant/supervisor understands and acknowledges the requirements of the devices to operate safely.

13VAC5-31-75. Local building department.

- Item A. - Rationale: Multiple inflatables with multiple generators that require large amounts of gasoline create a hazardous condition. We have seen larger portable generators in the 19,000 watt range used to power large rides. These configurations need to be inspected for electrical and flammable liquid hazards.
- Item C. - Rationale: Five days to thirty days to allow for verification of documents and properly review and process the permit. Current standard of five days does not provide enough time.
- Item D. - Rationale: Material that is used for inflatables similar to the flammability of tents. Generator tent reference in Virginia

Statewide Fire Prevention Code section 3106.6.2 and 3107.16. Fire extinguisher Section “D- D1” is a NEW SECTION ADDED – following existing sections renumbered below. Complies with the requirements and travel distance of NFPA10.

- Item E. - Rationale: Previously, inspections for installations were considered valid for up to six months or one year after completion. Under that system, as long as the installation or assembly occurred within that period, no new inspection was required. Moving forward, requiring an inspection for every assembly/set up ensures that each installation meets required safety standards and reflects the specific conditions present at the time of setup. The former approach allowed for variations in environmental and site conditions to go unverified, which could lead to nonconformities or safety risks such as uneven or soft terrain, unanchored or improperly anchored inflatables, inadequate clearance to overhead power lines, damaged extension cords, improper storage of flammable liquids, etc.
- Item F. - Rationale: In absence of a manual, referencing state code and ASTM standards fulfills the requirement for installation standards at events. Manuals are not provided to inspectors to verify inflatable is installed safely and securely. Based on inflatable size and per ASTM and building code wind load requirements, in the absence of actual instruction in the manual from the manufacturer, 150 pounds of weight per anchor or $\frac{3}{4}$ ” diameter, 18” long, driven in at a 45° angle with the tip pointed toward the inflatable. Stakes at each anchor point should be sufficient to keep the inflatable from becoming airborne. The manuals advise using a tarp or ground cover beneath the unit to protect it and minimize wear and tear, especially on hard surfaces. The manual is considered the authoritative source for set up and takedown procedures and safety.

Cost Impact: The code change proposal will not increase or decrease the cost

No increases.

Attached Files

- **ADI Final with pictures3.pdf**

<https://va.cdpaccess.com/proposal/1494/2165/files/download/958/>

Background

Due to recently developing issues and ongoing compliance problems with vendors setting up primarily inflatable amusement devices, this code change is proposed in the best interest of all parties involved — the property owners, vendors, customers, and the inspectors tasked with ensuring safety and compliance.

In 2025, Loudoun County has permitted and stickered approximately 750 amusement devices. This increase followed the transfer of the amusement device inspection function from the Building Department to the Fire Marshal's Office. With the Fire Marshal's Office operating as part of a 24-hour emergency response agency, inspections have been made available during evenings and weekends where they were previously unavailable.

These extended inspection hours have revealed a growing number of questionable and unsafe installation practices, including: missing installation or operation manuals, lack of on-site attendants, improper staking and tethering, trip and impalement hazards, frayed or damaged power cords, leaking generators, missing, insufficiently charged, or out-of-date fire extinguishers, overloaded generators, and excessive quantities of gasoline on site.

Inspectors are increasingly finding themselves in disputes with vendors because the current code language is vague and ambiguous, leaving many questions unanswered. While some manufacturer installation manuals provide sufficient direction, many do not. The proposed changes are intended to establish clear, enforceable requirements that promote safe operation, reduce ambiguity, and eliminate unnecessary confrontations between inspectors and vendors. These clarifications will also assist end users who rent these devices, helping to ensure their installations can be approved without last-minute compliance issues related to inadequate anchoring or other deficiencies.

Proposed Changes

Black text = existing language to remain

Red text = new or changed language

Green text = rationale statement

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 No. B77.1-2017 for the regulation of passenger tramways; and
2. American Society for Testing and Materials (ASTM) Standard Nos. F747-21a, F770-21a, F1159-16e1, F1193-18a, F1957-99 (2017), F2007-18, F2137-19, F2291-19 F2291-21, F2374-21a, F2375-09 (2017), F2376-21a, F2460-19, F2461-20a, F2959-21, F2960-16, F2970-20, F2974-20, and F3054-18 for the regulation of amusement devices.

The standards referenced in subsection A of this section may be procured from:

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- 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. **Pertaining to inflatable devices, the operator/attendant/supervisor shall have received training or instruction on the proper set up and operation or the inflatable.**

Rationale: It is the intent of this change to have the vendor provide training or guidance to personnel that will be in attendance overseeing use of this device. A manual on site will ensure operator/attendant/supervisor understands and acknowledges the requirements of the devices to operate safely.

- 3. 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
- 4. The operator of an amusement device shall not be (i) under the influence of any drugs 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.

13VAC5-31-75. Local building department.

A. In accordance with §§ 36-98.3 and 36-105 of the Code of Virginia, the local building department shall be responsible for the enforcement of this chapter and may charge fees for such enforcement activity. The total amount charged for any one permit to operate an amusement device or devices or the renewal of such permit shall not exceed the following, except that when a private inspector is used by the owner or operator of the device, the fees shall be reduced by 75%:

1. \$55 for each small mechanical ride or inflatable amusement device covered by the permit;
2. \$75 for each circular ride, institutional trampoline, or flat-ride less than 20 feet in height covered by the permit, except concession go-karts.
 - Concession go-kart fees shall not exceed \$300 per track, for tracks with up to 20 karts. An additional fee of up to \$10 may be charged for each additional kart in excess of 20;
3. \$100 for each spectacular ride covered by the permit that cannot be inspected as a circular ride or flat-ride in subdivision 2 of this subsection due to complexity or height, except zip lines.
 - Zip line fees shall not exceed \$150 for each zip line. For the purpose of this section, each portion from launch point to landing point shall be considered a separate zip line and each zip line between a launch point and landing point shall also be considered a separate zip line;
4. \$200 for each coaster covered by the permit that exceeds 30 feet in height;
5. \$400 for each coaster covered by the permit that exceeds 60 feet in height; and
6. The local building department may charge an additional fee for permits and inspections of generators and associated wiring for amusement device events. Generators subject to these fees are those used exclusively with amusement devices and that are inspected by the local building department. The fee per event shall not exceed \$165 and shall not exceed the actual cost to perform the inspection or inspections.

Exception: Small portable generators serving only cord and plug connected equipment loads are not subject to the fee.

1. The wattage for any small generator shall not exceed 3500 watts. Small portable generators exceeding this wattage shall not be exempt.
2. Events with multiple generators exceeding three small portable generators (3500 watts each) and/or more than 10 gallons of gasoline in storage cans shall not be exempt.

Rationale: Multiple inflatables with multiple generators that require large amounts of gasoline create a hazardous condition. We have seen larger portable generators in the

19,000 watt range used to power large rides. These configurations need to be inspected for electrical and flammable liquid hazards.

Notwithstanding the fee limitations established in this section, the local building department shall be permitted to increase the fees up to 50% when requested to perform weekend or after-hour inspections. The local building department shall also be permitted to increase fees up to 50% when a reinspection is required.

- B. Notwithstanding the provisions of subsection A of this section, when an amusement device is constructed in whole or in part at a site for permanent operation at that site and is not intended to be disassembled and moved to another site, then the local building department may utilize permit and inspection fees established pursuant to the USBC to defray the cost of enforcement. This authorization does not apply to an amusement device that is only being reassembled, undergoing a major modification at a site or being moved to a site for operation.
- C. A permit application shall be made to the local building department at least ~~five thirty (30)~~ days before the date in which the applicant intends to operate an amusement device. The application shall include the name of the owner, operator or other person assuming responsibility for the device, a general description of the device including any serial or identification numbers available, the location of the property on which the device will be operated, and the length of time of operation. The permit application shall indicate whether a private inspector will be used. If a private inspector is not used, the applicant shall give reasonable notice when an inspection is sought and may stipulate the day such inspection is requested provided it is during the normal operating hours of the local building department. In addition to the information required on the permit application, the applicant shall provide proof of liability insurance of an amount not less than \$1 million per occurrence or proof of equivalent financial responsibility. The local building department shall be notified of any change in the liability insurance or financial responsibility during the period covered by the permit.

Rationale: Five days to thirty days to allow for verification of documents and properly review and process the permit. Current standard of five days does not provide enough time.

- D. Generators shall be installed not less than 10 feet from combustible materials and isolated from the public. Generators must maintain a minimum distance of 20 feet from inflatables.

- 1. 2A:10BC Fire Extinguisher required within 75 ft of each generator in compliance with fire extinguisher requirements found in the Virginia Construction Code

Rationale: Material that is used for inflatables similar to the flammability of tents. Generator tent reference in Virginia Statewide Fire Prevention Code section 3106.6.2 and 3107.16. Fire extinguisher Section "D-D1" is a NEW SECTION ADDED

- following existing sections renumbered below. Complies with the requirements and travel distance of NFPA10.

E. ~~Notwithstanding the provisions of subsection C of this section, a permit application is not required for a small mechanical ride or an inflatable amusement device that has a certificate of inspection issued by any local building department in this Commonwealth either a six-month period for small mechanical rides or within a one-year period for inflatable amusement devices prior to the dates the small mechanical ride or inflatable amusement device is to be used, regardless of whether the device has been disassembled and moved to a new site. In such cases, the local building department shall be notified and provided with the information required on a permit application as listed in subsection C of this section at least three days prior to operation. In addition, and notwithstanding the provisions of subsection A of this section, the local building department shall be permitted to charge a \$50 inspection fee per event to the person notifying the local building department of an event where an inflatable amusement device is operating if the local building department chooses to inspect any or all of the inflatable amusement devices operating at that event. An inspection report shall be provided to the person notifying the local building department of the event if such an inspection is conducted.~~

A permit application is required for small mechanical rides, and inflatable amusement devices regardless of prior inspection issued by any local building department in the Commonwealth.

Rationale:

Previously, inspections for installations were considered valid for up to six months or one year after completion. Under that system, as long as the installation or assembly occurred within that period, no new inspection was required. Moving forward, requiring an inspection for every assembly/set up ensures that each installation meets required safety standards and reflects the specific conditions present at the time of setup. The former approach allowed for variations in environmental and site conditions to go unverified, which could lead to nonconformities or safety risks such as uneven or soft terrain, unanchored or improperly anchored inflatables, inadequate clearance to overhead power lines, damaged extension cords, improper storage of flammable liquids, etc.

F. Local building department personnel shall examine the permit application within ~~five thirty (30)~~ days and issue the permit if all requirements are met. A certificate of inspection for each amusement device shall be issued when the device has been found to comply with this chapter by a private inspector or by an inspector from the local building department. It shall be the responsibility of the local building department to verify that the private inspector possesses a valid certificate of competence as an amusement device inspector from the Virginia Board of Housing and Community Development.

1. The applicant must upload a manual for each device being used. If no manual is available, the applicant shall reference the state code to installation standards of inflatable devices. The manufacturer's operations manual must be obtained, kept on site and be followed for installation and operation. If the manual is not available, operations must comply with ASTM F2374, which covers design, manufacture, operation and maintenance of inflatable amusement devices. The regulations also detail safety requirements such as anchoring, operator presence wind speed limits and inspection guidelines.

Rationale: In absence of a manual, referencing state code and ASTM standards fulfils the requirement for installation standards at events.

2. In the absence of an installation manual for inflatables, each anchor point on the inflatable shall be secured with no less than 150 pounds of weight per anchor point for non-staked applications or each anchor point shall be staked with no less than a $\frac{3}{4}$ inch steel stake driven into the ground no less than 18 inches at a 45 degree angle with the tip pointed toward the inflatable.
 - a) The end/exposed remaining stake shall be blunted/protected to protect from injury.
 - b) Tethers shall be securely attached to the anchor points (weights/stakes)
3. If the owner's manual is available and includes instructions about a tarp being required to protect the bottom of the inflatable, those instructions must be followed and the tarp used accordingly.
4. In the absence of an installation manual the inflatable shall not be operated or inflated during wind speeds in excess of 15mph.
5. Failure to comply with this regulation or owner's manual requirements shall result in the ride/inflatable not being approved for use.

Rationale: Manuals are not provided to inspectors to verify inflatable is installed safely and securely. Based on inflatable size and per ASTM and building code wind load requirements, in the absence of actual instruction in the manual from the manufacturer, 150 pounds of weight per anchor or $\frac{3}{4}$ " diameter, 18" long, driven in at a 45° angle with the tip pointed toward the inflatable. Stakes at each anchor point should be sufficient to keep the inflatable from becoming airborne.

The manuals advise using a tarp or ground cover beneath the unit to protect it and minimize wear and tear, especially on hard surfaces. The manual is considered the authoritative source for set up and takedown procedures and safety.

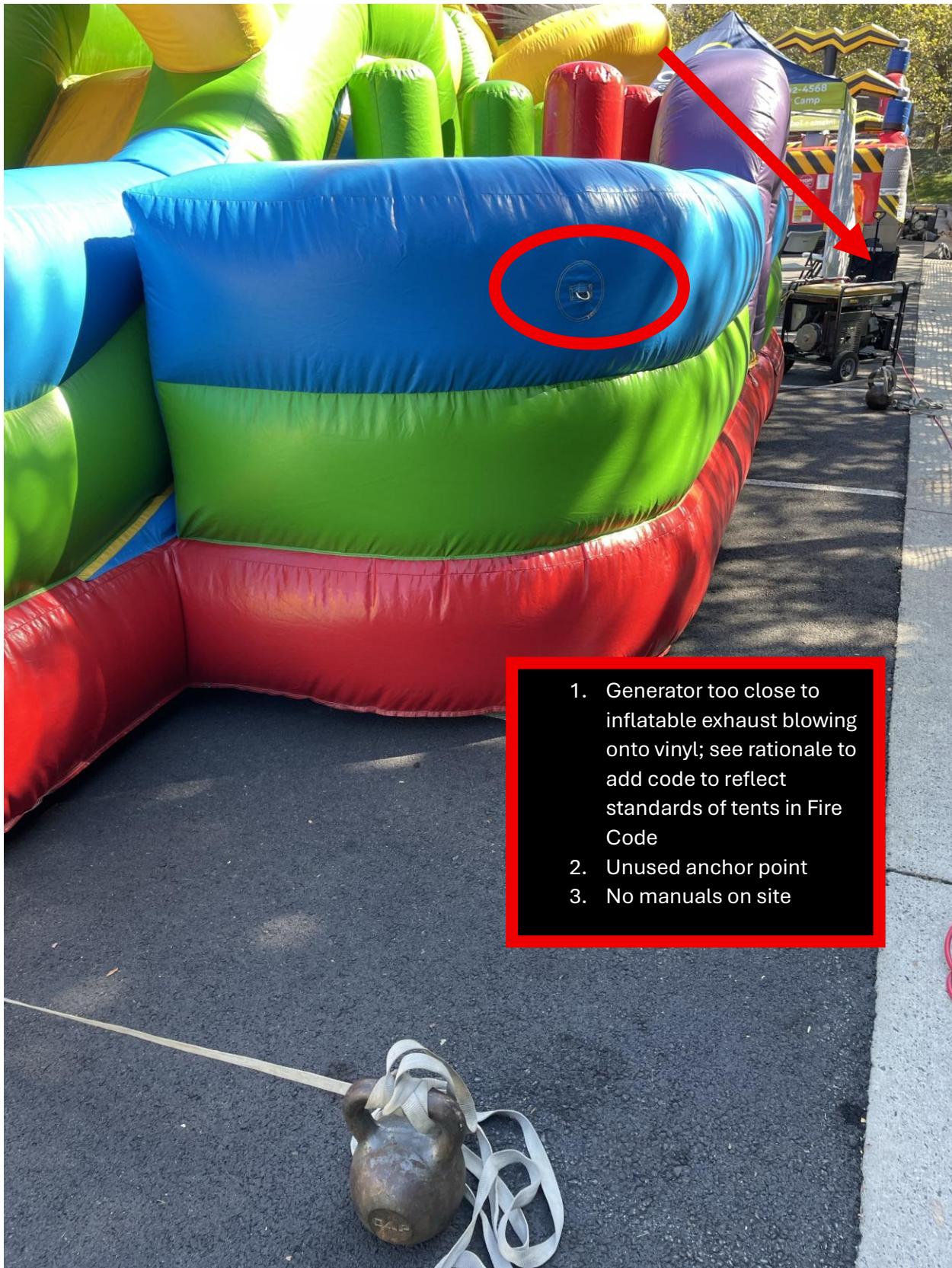
G. In addition, local building department personnel shall be responsible for assuring that the certificate of inspection is posted or affixed on or in the vicinity of the device in a location visible to the public. Local building department personnel shall

post or affix such certificates or permit the certificates to be posted or affixed by the private inspector. Permits shall indicate the length of time the device or devices will be operated at the site, clearly identify the device or devices to which it applies and the date of expiration of the permit. Permits shall not be valid for longer than one year, except that permits for small mechanical rides shall not be valid for longer than six months.

- H. In addition to obtaining a certificate of inspection in conjunction with a permit application for amusement devices permanently fixed to a site, a new certificate of inspection shall also be obtained prior to the operation of an amusement device following a major modification, prior to each seasonal operation of a device, at least once during the operating season and prior to resuming the operation of a device following an order from a local building department to cease operation. This requirement shall not apply to small mechanical rides meeting the conditions outlined in subsection D of this section.
- I. For amusement devices manufactured prior to 1978, the owner or operator shall have the information required by 10.1 through 10.6 of ASTM F1193 available at the time of inspection. In addition, the operator of any amusement device shall be responsible for obtaining all manufacturer's notifications, service bulletins and safety alerts issued pursuant to ASTM F770 and the operator shall comply with all recommendations and requirements set out in those documents. A copy of all such documents shall be made available during an inspection.
- J. In the enforcement of this chapter, local building department personnel shall have authority to conduct inspections at any time an amusement device would normally be open for operation or at any other time if permission is granted by the owner or operator, to issue an order to temporarily cease operation of an amusement device upon the determination that the device may be unsafe or may otherwise endanger the public and to accept and approve or deny requests for modifications of the rules of this chapter in accordance with the modification provisions of the USBC.
- K. 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 under this chapter 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.
- L. In accordance with § 36-98.3 of the Code of Virginia and 13VAC5-31-10 B, the procedures for violations of this chapter shall be as prescribed in the USBC.
- M. In accordance with § 36-98.1 of the Code of Virginia, the Virginia Department of General Services (DGS) shall function as the local building department for the application of this chapter to amusement devices located on state-owned property. In accordance with § 36-98.2 and 36-114 of the Code of Virginia, appeals of the application of this chapter by the DGS shall be made directly to the State Building Code Technical Review Board. Further, as a condition of this chapter, such appeals shall be filed within 14 calendar days after receipt of the decision of DGS.



Improper staking; manual not on site; vendor argued “this is how they’ve done it for years”
Common problem



USE FOR FUNNY FARM SLIDE



TRIPLE LINDY SLIDE (DRY) OPERATING INSTRUCTIONS

This instruction manual should be used in conjunction with Inflatable 2000, Inc. Operations Manual. Specific rules that apply to the Triple Lindy Slide are detailed in this manual. Always read the "Safety Rules" label attached to the inflatable game prior to operation. This label will specify any instructions relevant to the game ensure safe operation.

MODEL NUMBER	Triple Lindy Slide
SERIAL NUMBER	
DIMENSIONS	41'x18'7"x25'2"
INFLATION FAN REQUIREMENTS	(1) 1.5 HP blower (1) 1 HP Blower (Reverse air louver assembly)
MINIMUM ANCHOR / TETHER POINTS	(16)
MAXIMUM WEIGHT RESTRICTION	275 LB EACH RIDER
MINIMUM HEIGHT REQUIREMENT	44"
MAXIMUM HEIGHT REQUIREMENT	80"
MAXIMUM NUMBER OF PARTICIPANTS	3 TOTAL (1 RIDER PER LANE)
MINIMUM NUMBER OF TRAINED OPERATORS	3
TOTAL WEIGHT OF TRIPLE LINDY SLIDE	1,026 LBS



Pg. 1

TRIPLE LINDY (DRY) SLIDE COLLECTION OPERATING INSTRUCTIONS

NEE FARM

TRIPLE LINDY

1. Attendant(s) MUST be present and operating the inflatable unit at ALL times!
2. Set up your Triple Lindy Slide on an incline of no more than 15 degrees.
3. Be sure the area that you will be setting your inflatable up is free of all debris including any rocks or sharp objects. Grass or hard ground is fine for set up as long as there are no rocks, debris or sharp objects.
4. Lay out a ground tarp to protect the inflatable.
5. Footprint of inflated Triple Lindy Slide is: 41'x18'7"x25'2".
6. Required clearance from adjacent obstacles is five feet (5') around and above the perimeter of the inflatable.
7. Required area for inflated Triple Lindy Slide is: 51'x28'7"x30'2".
8. Unroll the inflatable and attach (2) 1.5 HP inflation blower (producing minimum 650 cubic feet per minute - Reverse air louver assembly) to the inflation tube. Tie off any unused blower tubes.

flaps are closed.
Anchor / tether the inflatable(s) before inflating. Using (16) 40" stakes at 80 % depth and 5/8" diameter into firm ground, such as grass or directly into asphalt. Staking should be 90 degrees (i.e. perpendicular). A minimum of 125 lb sand or water bag for 20 mph winds. See "Anchoring for soft and hard ground surfaces illustration in manual. (Stakes provided).

9. Tie off any unused blower tubes.
10. The Triple Lindy Slide is to be anchored by at least (16) anchor / tether points.
11. The Triple Lindy Slide should not be operated in wind speeds in excess of 15 MPH. Deflate immediately if wind gusts develop.
12. Do not secure the inflatable to a vehicle (or any object) that could be inadvertently moved while the Triple Lindy Slide is in operation.
13. You are now ready to inflate the unit.

- The trained operator(s) should now perform an inspection of the attraction.
 - It is strongly recommended that any parts of the inflatable showing any signs of wear or distress (worn seams, tears in the vinyl, broken zippers, etc...) be given special attention and immediately Pg. 2 sent back to Inflatable 2000 for repair or replacement (at owners expense).
 - (2) Trained operator(s) should be present at all times. Under no circumstances should the Triple Lindy Slide (or any inflatable), be left unattended! During operation of the Triple Lindy Slide, (1) trained operator(s) should stand in front of the entrance watching entrance / exit and (1) operator should be at the top platform. Operator(s) should stay at the front entrance directing patrons when to enter / exit and make sure



Proponents: Corian Carney, representing York County (corian.carney@yorkcounty.gov); Ryan Celestino, representing City of Newport News (celestinore@nnva.gov)

2021 Virginia Building and Fire Code Related Regulations

Revise as follows:

13VAC5-31-75. Local building department.

A. In accordance with §§ 36-98.3 and 36-105 of the Code of Virginia, the local building department shall be responsible for the enforcement of this chapter and may charge fees for such enforcement activity. The total amount charged for any one permit to operate an amusement device or devices or the renewal of such permit shall not exceed the following, except that when a private inspector is used by the owner or operator of the device, the fees shall be reduced by 75%:

1. \$55 for each small mechanical ride or inflatable amusement device covered by the permit;

Multi-device inflatables, or 'bounce parks' shall have separate fees for each device connected to the inflatable park.

2. \$75 for each circular ride, institutional trampoline, or flat-ride less than 20 feet in height covered by the permit, except concession go-karts.

Concession go-kart fees shall not exceed \$300 per track, for tracks with up to 20 karts. An additional fee of up to \$10 may be charged for each additional kart in excess of 20;

3. \$100 for each spectacular ride covered by the permit that cannot be inspected as a circular ride or flat-ride in subdivision 2 of this subsection due to complexity or height, except zip lines.

Zip line fees shall not exceed \$150 for each zip line. For the purpose of this section, each portion from launch point to landing point shall be considered a separate zip line and each zip line between a launch point and landing point shall also be considered a separate zip line;

4. \$200 for each coaster covered by the permit that exceeds 30 feet in height;

5. \$400 for each coaster covered by the permit that exceeds 60 feet in height; and

6. The local building department may charge an additional fee for permits and inspections of generators and associated wiring for amusement device events. Generators subject to these fees are those used exclusively with amusement devices and that are inspected by the local building department. The fee per event shall not exceed \$165 and shall not exceed the actual cost to perform the inspection or inspections.

Exception: Small portable generators serving only cord and plug connected equipment loads are not subject to the fee.

Notwithstanding the fee limitations established in this section, the local building department shall be permitted to increase the fees up to 50% when requested to perform weekend or after-hour inspections. The local building department shall also be permitted to increase fees up to 50% when a reinspection is required.

- B. Notwithstanding the provisions of subsection A of this section, when an amusement device is constructed in whole or in part at a site for permanent operation at that site and is not intended to be disassembled and moved to another site, then the local building department may utilize permit and inspection fees established pursuant to the USBC to defray the cost of enforcement. This authorization does not apply to an amusement device that is only being reassembled, undergoing a major modification at a site or being moved to a site for operation.

- C. A permit application shall be made to the local building department at least five days before the date in which the applicant intends to operate an amusement device. The application shall include the name of the owner, operator or other person assuming responsibility for the device, a general description of the device including any serial or identification numbers available, the location of the property on which the device will be operated, and the length of time of operation. The permit application shall indicate whether a private inspector will be used. If a private inspector is not used, the applicant shall give reasonable notice when an inspection is sought and may stipulate the day such inspection is requested provided it is during the normal operating hours of the local building department. In addition to the information required on the permit application, the applicant shall provide proof of liability insurance of an amount not less than \$1 million per occurrence or proof of equivalent financial responsibility. The local building department shall be notified of any change in the liability insurance or financial responsibility during the period covered by the permit.
- D. Notwithstanding the provisions of subsection C of this section, a permit application is not required for a small mechanical ride or an inflatable amusement device that has a certificate of inspection issued by any local building department in this Commonwealth either a six-month period for small mechanical rides or within a one-year period for inflatable amusement devices prior to the dates the small mechanical ride or inflatable amusement device is to be used, regardless of whether the device has been disassembled and moved to a new site. In such cases, the local building department shall be notified and provided with the information required on a permit application as listed in subsection C of this section at least three days prior to operation. In addition, and notwithstanding the provisions of subsection A of this section, the local building department shall be permitted to charge a \$50 inspection fee per event to the person notifying the local building department of an event where an inflatable amusement device is operating if the local building department chooses to inspect any or all of the inflatable amusement devices operating at that event. An inspection report shall be provided to the person notifying the local building department of the event if such an inspection is conducted.
- E. Local building department personnel shall examine the permit application within five days and issue the permit if all requirements are met. A certificate of inspection for each amusement device shall be issued when the device has been found to comply with this chapter by a private inspector or by an inspector from the local building department. It shall be the responsibility of the local building department to verify that the private inspector possesses a valid certificate of competence as an amusement device inspector from the Virginia Board of Housing and Community Development. In addition, local building department personnel shall be responsible for assuring that the certificate of inspection is posted or affixed on or in the vicinity of the device in a location visible to the public. Local building department personnel shall post or affix such certificates or permit the certificates to be posted or affixed by the private inspector. Permits shall indicate the length of time the device or devices will be operated at the site, clearly identify the device or devices to which it applies and the date of expiration of the permit. Permits shall not be valid for longer than one year, except that permits for small mechanical rides shall not be valid for longer than six months.
- F. In addition to obtaining a certificate of inspection in conjunction with a permit application for amusement devices permanently fixed to a site, a new certificate of inspection shall also be obtained prior to the operation of an amusement device following a major modification, prior to each seasonal operation of a device, at least once during the operating season and prior to resuming the operation of a device following an order from a local building department to cease operation. This requirement shall not apply to small mechanical rides meeting the conditions outlined in subsection D of this section.
- G. For amusement devices manufactured prior to 1978, the owner or operator shall have the information required by 10.1 through 10.6 of ASTM F1193 available at the time of inspection. In addition, the operator of any amusement device shall be responsible for obtaining all manufacturer's notifications, service bulletins and safety alerts issued pursuant to ASTM F770 and the operator shall comply with all recommendations and requirements set out in those documents. A copy of all such documents shall be made available during an inspection.
- H. In the enforcement of this chapter, local building department personnel shall have authority to conduct inspections at any time an amusement device would normally be open for operation or at any other time if permission is granted by the owner or operator, to issue an order to temporarily cease operation of an amusement device upon the determination that the device may be unsafe or may otherwise endanger the public and to accept and approve or deny requests for modifications of the rules of this chapter in accordance with the modification provisions of the USBC.

- I. 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 under this chapter 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.
- J. In accordance with § 36-98.3 of the Code of Virginia and 13VAC5-31-10 B, the procedures for violations of this chapter shall be as prescribed in the USBC.
- K. In accordance with § 36-98.1 of the Code of Virginia, the Virginia Department of General Services (DGS) shall function as the local building department for the application of this chapter to amusement devices located on state-owned property. In accordance with § 36-98.2 and 36-114 of the Code of Virginia, appeals of the application of this chapter by the DGS shall be made directly to the State Building Code Technical Review Board. Further, as a condition of this chapter, such appeals shall be filed within 14 calendar days after receipt of the decision of DGS.

Reason Statement: This change is aimed at eliminating confusion between applicants and building departments for the purpose of fee schedules when large inflatables are used that encompass multiple devices.

Cost Impact: The code change proposal will not increase or decrease the cost
This change is only a clarification to prevent future confusion.