# **Department of Labor and Employment**

# **Division of Oil and Public Safety**

### 7 CCR 1101-12

### AMUSEMENT RIDES AND DEVICES

### 1.0 General

### 1.1 Statutory authority.

C.R.S. § 8-20-1001 through 8-20-1004

### 1.2 Purpose.

This regulation is promulgated to establish reasonable standards for the construction, repair and maintenance of amusement rides and devices located in Colorado in the interest and safety of the general public, to establish financial standards for the operation of amusement rides and devices in a public setting and to provide for a registration process for amusement rides and devices.

#### 1.3 Codes and Standards.

The following codes of the American Society for Testing and Materials (ASTM) F24 Committee on Amusement Rides and Devices, National Fire Protection Association and the Association for Challenge Course Technology (ACCT) are incorporated by reference. All amusement rides and devices shall comply with these standards, including but not limited to the following unless specifically exempted in these regulations. If there is no applicable standard for an amusement ride or device, operators shall comply with the manufacturer's recommendations.

Standard Practice for Ownership and Operation of Amusement Rides and Devices Designation: F 770-11
ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

Standard Guide for Testing Performance of Amusement Rides and Devices Designation: F 846-92 (reapproved 2009)
ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

Standard Practice for Maintenance Procedures for Amusement Rides and Devices Designation: F 853-05
ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

Standard Guide for Auditing Amusement Rides and Devices Designation: F 893-10 ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 Standard Practice for Design and Manufacture of Patron Directed, Artificial Climbing Walls, Dry Slide, Coin Operated and Purposeful Water Immersion Amusement Rides and Devices and Air Supported Structures

Designation: F 1159-11 **ASTM** International 100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Standard Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices

Designation: F1193-06 **ASTM International** 100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Standard Guide for Classification of Amusement Ride and Device Related Injuries and Illnesses

Designation: F 1305-94 (Reapproved 2002)

**ASTM International** 100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Standard Practice for Design, Manufacture, and Operation of Concession Go-Karts and Facilities

Designation: F2007-12 **ASTM International** 100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Standard Practice for Measuring the Dynamic Characteristics of Amusement Rides and Devices

Designation: F 2137-11 **ASTM** International 100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Standard Practice for Design of Amusement Rides and Devices

Designation: F 2291-11 **ASTM International** 100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Standard Practice for Classification, Design, Manufacture, Construction, and Operation of Water Slide Systems

Designation: F 2376-08 **ASTM** International 100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Standard Practice for Special Requirements for Bumper Boats

Designation: F 2460-11 **ASTM** International 100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Standard Practice for Special Requirements for Aerial Adventure Courses

Designation: F 2959-12 **ASTM International** 100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

National Electrical Code 2011 Designation: NFPA 70

National Fire Protection Association

One Batterymarch Park Quincy, MA 02169-7471 Challenge Course and Canopy/Zip Line Tour Standards Eighth Edition Association for Challenge Course Technology Po Box 47 Deerfield, IL 60015

Interested parties may inspect the referenced incorporated materials by contacting the Program Manager, Amusement Rides and Devices, 633 17<sup>th</sup> Street, Suite 500, Denver, CO 80202 and/or The State Depository Libraries.

This rule does not include later amendments to or editions of the incorporated material.

### 1.4 Definitions.

Amusement Ride or Device: Shall mean any mechanized device or combination of devices which carry or convey persons along, around or over a fixed or restricted course for the purpose of giving its passengers amusement, pleasure, thrills, excitement or the opportunity to experience the natural environment. Amusement rides and devices include but are not limited to, an aggregation of amusement rides and devices in an amusement setting such as amusement parks, carnivals, fairs and festivals. Amusement rides and devices also include but are not limited to, bungee jumping, bungee trampolines, climbing walls in amusement settings, concession go-karts, bumper boats, gravity-propelled rides and devices, water slides and traditional amusement rides.

Bumper Boats: Shall mean boats that are used to bump into each other intentionally as directed by drivers as a form of entertainment.

Bungee Trampolines: Shall mean a type of trampoline where the patron is assisted by a harness attached to bungee cords.

Certificate of Inspection: Shall mean the documentation of the annual amusement ride inspection conducted by a qualified third-party inspector.

Class A Amusement Ride: Shall mean an amusement ride designed primarily for use by children 12 years of age or younger, typically referred to as a "kiddie ride."

Class B Amusement Ride: Shall mean any amusement ride not defined as a Class A amusement ride.

Climbing Wall: Shall mean an artificially constructed wall with holds for hands and feet used for climbing. Regulated climbing walls include climbing walls located in amusement settings and fixed or portable climbing walls for use by the general public as amusement devices and not for sport or fitness training.

Concession Go-karts: Shall mean a single vehicle which is powered without connection to a common energy source, which is driver controlled with respect to acceleration, speed, braking and steering, which operates within the containment system of a defined track, which simulates competitive motor sports, and which is used by the general public. Concession go-karts typically operate at speeds of up to 25 miles per hour.

Director: Shall mean the Director of the Division of Oil and Public Safety or his designee.

Division: Shall mean the Division of Oil and Public Safety of the Department of Labor and Employment.

Inspection: Shall mean a procedure to be conducted by a third-party inspector to determine whether an amusement ride or device is being constructed, assembled, maintained, tested, operated, and inspected in accordance with the standards adopted by these regulations and the manufacturer's recommendations, as applicable, and that determines the current operational safety of the ride or device. All inspections shall be documented by a written inspection report to be filed with the operator.

Inspector: Shall mean a third party qualified by training, such as attainment of Level II certification from the National Association of Amusement Ride Safety Officials (NAARSO), attainment of Level II certification from the Amusement Industry Manufacturers and Suppliers International (AIMS), attainment of a Qualified Inspector certification from the Association for Challenge Course Technology (ACCT), Pennsylvania Department of Agriculture – General Qualified Inspector status or other similar qualification from another nationally recognized organization; or education, such as

registration as a Professional Engineer; or experience evaluated and approved in advance, by the Division, to conduct inspections of amusement rides or devices in accordance with the standards adopted by these regulations and the manufacturer's recommendations and criteria.

Operator: Shall mean a person or the agent of a person, corporation or company who owns or controls or has the duty to control the operation of an amusement ride or device.

Permit Year: Shall mean the time during which an operator is registered that begins on the registration effective date and ends 12 months from the effective date. These dates appear on the signed registration that an operator receives once the registration application has been approved.

Race-karts: Shall mean a go-kart designed for competitive sport racing use in either sanctioned racing on tracks or other areas of competition, or in a racing school facility, and not to be used by the general public in an amusement facility. Race-kart drivers must wear approved safety equipment, consisting of a minimum of a Snell or DOT approved helmet and closed-toed shoes. Race-karts regularly reach maximum speeds in excess of 25 miles per hour.

Registration: Shall mean the filing of a properly completed application with the Division and approval of the application by the Director.

Reportable Injury: Shall mean any personal injury 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/illness that requires immediate admission and overnight hospitalization and observation by a licensed physician. Reportable injuries do not include treatment with first aid even if performed by a physician unless treatment is a result of any reason listed above.

Ride Operator: Shall mean the person that has control of the amusement ride or device at all times or is supervising a patron-directed device when it is being operated for the public's use. This person must be trained in accordance with the standards adopted by these regulations and in accordance with an operator training program or specifications provided by the amusement ride or device designer, engineer or manufacturer.

Water slides: Shall mean rides intended for use by riders in bathing attire where the action of the ride involves possible and purposeful immersion of the rider's body either in whole or in part in water, and uses circulating water to mobilize or lubricate the rider's transportation along a purpose built path.

Zip line: Shall mean a concession, commercial amusement device where participants attached to a pulley traverse by gravity from one point to another by use of a cable or rope line suspended between support structures.

### 1.5 Exemptions.

The following rides and devices are exempt from the provisions of these rules and regulations:

- (a) Coin operated model horse and model rocket rides, mechanical horse or bull rides, and other coin activated or self-operated devices.
- (b) Non-mechanized playground equipment including but not limited to swings, seesaws, stationary spring mounted animal features, rider propelled merry-go-rounds, climbers, slides, trampolines, swinging gates and physical fitness devices.
- (c) Live animal rides or live animal shows.
- (d) Climbing walls used for sport and fitness training, located in educational facilities, schools, gymnasiums, sport and public entity recreational facilities, or other facilities devoted to sport and recreational activities, training and instruction.
- (e) Race-karts owned and operated by individuals who compete against each other, or rental race-karts available for rent at competitive sport race-kart tracks solely used for sanctioned racing where drivers have attended and passed a practical driver safety training test to establish their competency, or hold an applicable valid competition license from a recognized motor sport sanctioning body.

- (f) Skating rides, arcades, laser paintball games, bowling alleys, miniature golf courses, inflatable devices, ball crawls, exercise equipment, jet skis, paddle boats, air boats, hot air balloons whether tethered or untethered, batting cages, games and side shows.
- (g) Any amusement ride or device operated at a private event that is not open to the general public and not subject to a separate admission charge, or any amusement ride or device owned and operated by a non-profit organization who meets all the requirements in Sections 2.1, 2.2(a), 2.2(g), 2.2(h), and 2.2(i) of these regulations and operates their rides less than 8 days in any calendar year.
- (h) Any amusement ride or device operator who notifies the Director of the Division of Oil and Public Safety in writing that his or her ride or device is inspected and licensed or issued a permit by one of the following agencies where said agency inspects and issues a license or permit for the ride or device shall be exempt from the requirements of this subsection, provided that the requirements of said agency meet or exceed the requirements of this regulation.
  - (1) any municipality or local government within the state of Colorado
  - (2) another state agency within the state of Colorado
  - (3) any federal government agency
- (i) Any local government that has received a temporary or permanent waiver from the Director of the Division of Oil and Public Safety pursuant to Executive Order D 2011-005. To obtain a waiver the affected local government must demonstrate that the requirements in these regulations conflict with other statutes or regulations (including those of local governments) or are unduly burdensome. A cost benefit analysis or other supporting documentation should be included with the waiver request.
- (j) Water slides less than 18 feet in elevation change from point of dispatch to the end of the slide.

### 2.0 Standards.

Amusement rides and devices may not operate within the State of Colorado unless the operator has registered with the Division of Oil and Public Safety and has satisfied and is continuing to satisfy the following standards.

### 2.1 Financial standards.

Any person who operates an amusement ride must have currently in force an insurance policy written by an insurance company authorized to do business in this state or by a surplus lines insurer, in an amount of not less than \$100,000 per occurrence with a \$300,000 annual aggregate for Class A amusement rides and devices and an amount of not less than \$1 million per occurrence for Class B amusement rides and devices insuring the owner or operator against liability for injury to persons arising out of the use of the amusement ride. For governmental entities, insurance or self-insurance in accordance with section 24-10-115 of The Governmental Immunity Act, or participation in a public entity self-insurance pool pursuant to section 24-10-115.5 of The Governmental Immunity Act shall be deemed to meet the financial standards of this section.

### 2.2 Safety and health standards.

Amusement rides shall be constructed, maintained and repaired subject to the following standards:

- (a) Amusement rides or devices or any part thereof shall be constructed, maintained and repaired in accordance with the standards adopted by these regulations and the manufacturer's recommendations, as applicable, in order to provide for an operation free from recognized safety hazards.
- (b) Amusement rides and devices shall be constructed, maintained, repaired and operated in accordance with all otherwise applicable federal, state and local safety, fire, health or building codes or standards.
- (c) An annual inspection by a third-party inspector must be conducted on each amusement ride. The inspection shall be conducted with the amusement ride or device in an operable state prior to opening to the public and include an evaluation of the ride or device for a minimum of one complete operating cycle where applicable. The inspection

shall also include a review of the operator's daily inspection records, inspection and maintenance program records and training records in accordance with the standards adopted by these regulations and the manufacturer's recommendations, as applicable.

- (d) A separate certificate of inspection shall be completed and signed by the inspector for each amusement ride or device and shall be submitted with the operator's application for registration. An inspection report for each amusement ride or device shall be made available to the Director or his agent and auditors/inspectors, at reasonable times, including during an inspection upon the auditor's/inspector's request.
- (e) The inspection certificate shall not be submitted to the Division of Oil and Public Safety until all discrepancies have been resolved and all necessary repair(s) or replacement(s) required in accordance with the standards of Section 2.2.(a) have been made. Resolution of discrepancies, repairs and replacements may be documented in writing by the owner/operator and delivered to the inspector. The inspector may corroborate such letter by review thereof, subsequent re-inspection, receipt of additional documentation, or by other means which the inspector deems appropriate. Corroborated discrepancies, repairs and replacements shall not require further inspection and such resolution shall be deemed to be in accordance with the standards of Section 2.2(a).
- (f) If the amusement ride or device does not meet the standards of Section 2.2(a), the amusement ride shall not be opened to the public until all necessary repair(s) and/or replacement(s) have been made and a certificate of inspection has been issued.
- (g) In addition to the annual inspection required under this section, the owner/operator who operates an amusement ride or device must perform and record daily inspections of each amusement ride or device.
- (h) Records of the daily inspections must be available for inspection at the location where the amusement ride or device is operated, and the records must be maintained with the amusement ride or device for a period of three years.
- (i) The daily inspection record must include an inspection of equipment identified for daily inspection in accordance with the applicable codes and the manufacturer's recommendations. Where applicable, the inspection shall include:
  - (1) safety belts, bars, locks and other passenger restraints;
  - (2) all automatic and manual safety devices;
  - (3) signal systems, brakes and control devices;
  - (4) safety pins and keys;
  - (5) fencing, guards, barricades, stairways and ramps;
  - (6) ride structure and moving parts;
  - (7) tightness of bolts and nuts;
  - (8) blocking, support braces and jackstands;
  - (9) electrical equipment;
  - (10) lubrication as per manufacturer's instructions;
  - (11) hydraulic and/or pneumatic equipment;
  - (12) check communication equipment necessary for operation;
  - (13) prior to opening, operate ride through one complete cycle of proper functioning; and

(14) any other component that is included in the manufacturer's specific ride maintenance and safety checks or standards adopted by these regulations, or that the operator or person performing the daily inspection deems necessary for inspection.

- (j) No person shall open to the public an amusement ride or device that has been inspected by a qualified inspector or by the Division of Oil and Public Safety and found to be unsafe, unless all necessary repairs and modifications to the ride have been completed and certified as completed by a qualified inspector.
- (k) Amusement rides and devices of site-specific or prototype construction shall be constructed, maintained, and repaired as certified by a Professional Engineer. The certifications must be available for review by the Director. All such devices must comply with all applicable building and fire codes.

## 3.0 Registration.

No amusement ride or device shall operate within the State of Colorado without first becoming registered as provided herein. Each operator of an amusement ride or device must register and obtain a permit by filing an application with the Division of Oil and Public Safety, prior to opening rides to the public.

No person shall open to the public and operate any amusement ride or device on property owned or leased by such person until the operator of the amusement ride or device has first registered and obtained a permit for operation from the Division of Oil and Public Safety.

The application shall be submitted annually on the form prescribed by the Director and shall include the following registration requirements.

#### 3.1 Fees

### Annual registration fees as identified in the accompanying table:

Fee Category	Registration fee for amusement ride or device operator	+	Registration fee per ride or device
Fee Amount	\$500	+	\$130

#### 3.2 Registration Requirements

- (a) The name and address of the operator.
- (b) The trade name of the manufacturer, and the serial number of all rides and devices.
- (c) A report of any injury occurring in any state caused by an amusement ride which results in death or requires medical treatment. An injury is caused by the ride if the injury occurs on the ride or is in any way associated with the ride.
- (d) A list of the dates and locations of operation of the amusement rides or devices within the state for the upcoming permit year, including the dates at each location. This list may be updated throughout the permit year, provided that notification is received by the division prior to operation.
- (e) The name of all liability insurance carriers and the insurance policy numbers.
- (f) An original amusement ride certificate of inspection for each amusement ride or device showing the name, serial number, manufacturer of the ride, the inspector's name, the owner/operator and other information as required by 2.2.(d) of these rules.

- (g) Any other information reasonably related to the standards set forth above in Section 2.0.
- (h) A certificate of liability insurance for the registration period in an amount of not less than \$100,000 per occurrence with a \$300,000 annual aggregate for Class A amusement rides and devices and an amount of not less than \$1 million per occurrence for Class B amusement rides and devices insuring the owner or operator against liability for injury to persons arising out of the use of the amusement ride or device. For governmental entities, insurance or self-insurance in accordance with Section 24-10-115 of The Governmental Immunity Act, or participation in a public entity self-insurance pool pursuant to Section 24-10-115.5 of The Governmental Immunity Act shall be deemed to meet the financial standards of this section.
- 3.3 Upon receipt of an application, the Director shall review the application, and upon determining that the provisions of these rules have been met, shall approve the application, register the amusement rides or devices and issue a permit to operate.
- 3.4 Upon receipt of an incomplete application or an application requiring additional information, the applicant will be notified of the deficiency or additional requirements. If the deficiency is not corrected or if the Division does not receive the additional information within 180 days following the date of notification, the application shall be considered abandoned and the Division shall not retain the application.

### 3.5 Bungee Jumping - Documentation of:

- (a) A system review (structures, cords, harnesses, attachment components, etc.) that includes evaluation and inspection by a Colorado registered Professional Engineer, with his certification/stamp that the system design is adequate for the intended application, shall be provided to the Public Safety Section.
- (b) All elements of the American Society for Testing and Materials Standards on Amusement Rides and Devices (2010 Edition), excluding the subsequent addenda incorporated by the code forward, are to be conformed to as a minimum standard. Documentation of this conformity shall be provided to the Public Safety Section.
- (c) Where the facility incorporates a crane structure for hoisting customers and/or staff members, the mechanism must conform to national standards. These standards include both the Occupational Safety and Health Administration Standards (OSHA) 1926.550 August 9, 2010, excluding the subsequent addenda incorporated by the code forward, and the American Society of Mechanical Engineers (ASME) B30.5 2007. Documentation of this conformity shall be provided to the Public Safety Section.
- (d) Where the facility incorporates a hot air balloon for elevation purposes, copies of the current, valid Standard Airworthiness Certificate and Special Airworthiness Certificate issued by the Federal Aviation Administration (FAA), and records showing that all maintenance and alterations have been performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations excluding the subsequent addenda, shall be provided to the Public Safety Section.

### 4.0 Records.

Every amusement ride or device operator shall maintain detailed records relating to the construction, repair and maintenance of its operation including safety, inspection, maintenance records, and ride operator training activities. Such records shall be made available to the Director or his agent and auditors/inspectors, at reasonable times, including during an inspection upon the auditor's/inspector's request.

### 5.0 Enforcement.

The Director provides these regulations to assist operators with safe and proper operation of amusement rides and devices. Division staff may inspect the premises and operation of the amusement ride or device to insure that the financial and safety standards in this regulation have been met. When an amusement ride or device is found to be out of compliance with these regulations (7 C.C.R. § 1101-12) and/or statutes (C.R.S. § 8-20), the Director will pursue enforcement actions against the operator. The enforcement process will include requiring the operator to make repairs and/or upgrades, perform system tests, provide records and complete other actions to bring the amusement ride or device back into compliance. During and following the enforcement process, the Director will continue to assist the operator to remain in compliance. The enforcement process may include monetary penalties up to one thousand dollars (\$1,000) per

violation per day according to statute (C.R.S. § 8-20-104(4)(a)) if the enforcement obligations are not implemented according to the required schedule.

#### 5.1 Notice of Violation

- (a) A notice of violation (NOV) may be issued when an amusement ride or device is found to be out of compliance with these regulations and/or statutes (C.R.S. §8-20). The notice of violation may include an order to cease and desist operation of the specific amusement ride or device until all violations are satisfactorily corrected.
- (b) Within ten working days after an NOV has been issued, the person issued the NOV may file a written request with the Director for an informal conference regarding the NOV. If the person issued the NOV does not request an informal conference within this time frame, all provisions of the NOV shall become final and not subject to further discussion. If the NOV is not resolved within the prescribed time frame, the Director may then seek judicial enforcement of the NOV, or an enforcement order may be issued.

### 5.2 Enforcement Order

- (a) An enforcement order may be issued when the violations included within an NOV are not resolved within the prescribed time frame. The enforcement order may include increased fines up to one thousand dollars (\$1,000.00) per violation for each day of violation. In addition, the enforcement order may include shut-down of the amusement ride or device.
- (b) Within ten working days after an enforcement order has been issued, the operator may file a written request with the Executive Director for an informal conference regarding the enforcement order. If the operator does not request an informal conference within this time frame, all provisions of the enforcement order shall become final and not subject to further discussion. If the enforcement order is not resolved within the prescribed time frame, the Director may then seek judicial enforcement of the enforcement order.

#### 5.3 Informal Conference

- (a) Upon receipt of the request, the director shall provide the operator with notice of the date, time and place of the informal conference. The director shall preside at the informal conference, during which the operator and Division personnel may present information and arguments regarding the allegations and requirements of the NOV or the enforcement order.
- (b) Within twenty days after the informal conference, the Director shall issue a settlement agreement in which the violations from the NOV and/or enforcement order will be upheld, modified or stricken. The settlement agreement will include a schedule of required activity for resolution of the violations. If the terms and/or schedule in the settlement agreement are not satisfied, an enforcement order will be issued, re-issued or the Director may seek judicial enforcement.

## 6.0 Injury reporting.

- A reportable injury as defined in Section 1.4 shall be reported to the Division by leaving a message at 303-514-3281 within 24 hours of the time that the ride operator or operator becomes aware of the injury. A written report on a form provided by the Division shall be submitted to the Division within 72 hours of the time that the ride operator or operator becomes aware of the injury.
- 6.2 If a reportable injury results from the possible malfunction or failure of an amusement ride or device, the equipment or conditions that caused the accident shall be preserved for the purpose of an investigation by the Division of Oil and Public Safety unless an investigation is deemed unnecessary by the Division.

### 7.0 Effective date.

This regulation shall be effective April 15, 2013. The operators of previously unregistered amusement rides and devices shall have up to three months from the effective date of these regulations to comply with Section 2.2 (c).