

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

CARNIVAL AND AMUSEMENT SAFETY

GENERAL RULES

Filed with the secretary of state on March 20, 2024

These rules become effective immediately after filing with the secretary of state unless adopted under section 33, 44, or 45a (9) of the administrative procedures act of 1969, 1969 PA 306, MCL 24.233, 24.244, or 24.245a. Rules adopted under these sections become effective 7 days after filing with the secretary of state.

(By authority conferred on the director of the department of licensing and regulatory affairs by section 6 of the carnival-amusement safety act of 1966, 1966 PA 225, MCL 408.656, and Executive Reorganization Orders Nos. 1991-9, 1996-2, 2003-1, 2008-4, and 2011-4, MCL 338.3501, 445.2001, 445.2011, 445.2025, and 445.2030)

R 408.802, R 408.803, R 408.814, R 408.829, R 408.831, R 408.832, R 408.839, R 408.839a, R 408.844, R 408.848, R 408.872, R 408.874, and R 408.897 of the Michigan Administrative Codes are amended, R 408.815 and R 408.816 are added, and R 408.833 and R 408.843 are rescinded, as follows:

PART 1. GENERAL PROVISIONS

R 408.802 Safety requirements for carnival-amusement rides and devices.

Rule 2. (1) Electrical wiring, apparatus, and equipment must be manufactured, installed, and maintained as prescribed in the national electrical code (NFPA 70), 2020 edition, published by the National Fire Protection Association. The provisions of the national electrical code are adopted by reference as electrical standards for the carnival and amusement rides and devices in this state.

(2) These adopted provisions may be purchased for a cost of \$121.50, at the time of adoption of these rules, from the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, telephone: 800-344-3555 or 617 -770-3000, website address: [www.nfpa.org](http://www.nfpa.org). A copy of this code and the general rules are available for inspection and purchase at the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes 611 W. Ottawa Street, Lansing, Michigan 48909, 517 - 241- 9313, for a cost of \$121.50 at the time of adoption.

(3) The department adopts by reference the ASTM Standards on Amusement Rides and Devices, established by ASTM F-24 Committee, ASTM Volume 15.07, November 2022 as it relates to a carnival or amusement ride, as that term is defined in section 2 of the act, MCL 408.652. The adopted standards may be purchased for a cost of \$338.00, at the time

of adoption of these rules, from The American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, P.O. Box C 700, West Conshohocken Pennsylvania 19428- 2959, customer service telephone: 610-832-9500, website address: <https://www.astm.org/astm-bos-15.07.html>. A copy of this code is available for inspection and purchase at the Department of Licensing and Regulatory Affairs Bureau of Construction Codes, 611 W. Ottawa Street, Lansing, Michigan 48909, Phone: 517 -241-9313, for a cost of \$338.00 at the time of adoption.

(4) The department adopts by reference the standards contained in the American National Standards Institute Safety (ANSI) requirements for aerial passenger tramways, ANSI B77.1 2017, for aerial passenger tramway amusement rides in this state. This adopted standard may be purchased at a cost of \$200.00, as of the time of adoption of these rules, from the American National Standards Institute (ANSI), 25 West 43rd Street, New York, New York 10036, telephone: 212-642-4900, fax: 212-398-0023, website address: <https://webstore.ansi.org/Standards/ANSI/ANSIB772017>. A copy of this code is available for inspection and purchase at the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa Street, Lansing, Michigan 48909, for a cost of \$200.00 at the time of adoption of these rules.

#### R 408.803 Definitions.

Rule 3. (1) As used in these rules:

(a) "Act" means the carnival-amusement safety act of 1966, 1966 PA 225, MCL 408.651 to 408.670.

(b) "Aerial passenger tramway" means any of the following devices used to transport passengers:

(i) "Single and double reversible aerial tramways" means devices that carry passengers in 1 or more enclosed cars that reciprocate between terminals.

(ii) "Chair lift, gondola lift, and monorail" means a device that carries passengers on chairs, cars, or in gondola cabs attached to and suspended from a moving wire rope or attached to a moving wire rope or chain and supported on a standing wire rope, rail, or other structure.

(c) "Amusement ride or amusement device" means a device or combination of devices or elements that carries, conveys, or directs an individual or individuals over or through a fixed or restricted course or within a defined area, for the primary purpose of amusement or entertainment. Amusement ride or amusement device does not include any of the following:

(i) Aerial adventure courses.

(ii) Aquatic play equipment.

(iii) Buildings or concourses used in laser games or paint ball.

(iv) Bungee jumping.

(v) Devices operated on a river, lake, or any other natural body of water.

(vi) Funhouses, haunted houses, and similar walk-through devices that are erected temporarily on a seasonal basis and do not have mechanical components designed to convey patrons.

(vii) Hayrides.

(viii) High speed go-karts capable of attaining speeds of 25 miles per hour or more.

(ix) Human-powered devices.

- (x) Ice skating rinks.
- (xi) Inflatable amusement devices.
- (xii) Luge and bobsled tracks.
- (xiii) Mechanical bulls.
- (xiv) Parasailing.
- (xv) Playground equipment, including, but not limited to, soft-contained play equipment, swings, seesaws, slides, stationary spring-mounted animal features, jungle gyms, rider-propelled merry-go-rounds, and trampolines.
- (xvi) Rock walls.
- (xvii) Roller skating rinks.
- (xviii) Simulators that can be safely exited mid-ride.
- (xix) Skateboard ramps or courses.
- (xx) Skydiving simulators.
- (xxi) Stationary wave systems.
- (xxii) Trampoline courts.
- (xxiii) Tubing and sledding hills.
- (xxiv) Wave pools.
- (xxv) Any other devices as determined by the department.
- (d) "Amusement park" means a tract or area used principally as a permanent location for carnival-amusement rides.
- (e) "Engineer's attestation" means a letter signed by a licensed engineer that states the device complies with the applicable act and rules as well as the standards and codes that are adopted by reference in R 408.802.
- (f) "Gravity ride" means a ride installed on a manmade inclined surface that entirely depends on gravity for its operation to convey a passenger from the top of the incline to the bottom in a singular lane and conveys the passenger in or on a carrier, tube, bag, bathing suit, or clothes.
- (g) "Major breakdown" means a stoppage of operation from any cause resulting in damage, failure, or breakage of a structural or stress-bearing part of a ride.
- (2) A term defined in the act has the same meaning when used in these rules.

#### R 408.814 Definitions; waterslide.

Rule 14. (1) Waterslide" means an inclined, nonmechanical amusement ride that has all of the following characteristics:

- (a) Consists of 1 or more courses of varying slopes and directions.
- (b) Relies on gravity and not a mechanical system to propel its passengers.
- (c) Uses water to lubricate the course and to regulate passenger velocity.
- (d) Includes a landing area or runout designed to bring riders to a complete stop and allow them to exit the ride in a safe manner.
- (2) "Waterslide" does not include slides that are not separate amusement rides but are customarily recreational equipment as evidenced by a vertical drop of 15 feet or less and a total linear slide length of 50 feet or less.

#### R 408.815 Routing sheets.

Rule 15. (1) Routing sheets that are in a paper or digital format are required to be submitted to the department by mobile operators at the time of application for a permit or

annual renewal of the permit. Routing sheets must include all of the following information:

(a) Specific address where the rides will be set up.

(b) Setup dates of the rides.

(c) Operation dates of the rides.

(d) Number of amusement devices on site, if available.

(e) Specific amusement devices on site, if available.

(2) Additional locations must be updated with the department as soon as information is available.

R 408.816 Operational training and emergency response training forms.

Rule 16. Forms to track training for staff operating devices must comply with all of the following:

(a) Be made available to the department on request.

(b) Be maintained in a digital format that contains all of the information that is included in the paper forms and made available to the department digitally upon request.

(c) Contain all of the following:

(i) The name of company.

(ii) The name of the device.

(iii) The state issued device number.

(iv) The staff member or members that have been trained.

(v) The date when the training was conducted.

(vi) The name of the trainer.

(vii) The training curriculum.

(viii) The signature of the trainer and the staff that were trained.

## PART 2. DESIGN, CONSTRUCTION, AND OPERATION

R 408.829 Seating and carrying devices.

Rule 29. (1) Tubs, cars, chairs, seats, gondolas, and other carriers used on a ride must be designed and constructed as strong as practical. A ride's interior and exterior parts that passengers might come in contact with must be smooth, rounded, free from sharp, rough, or splintered edges or corners, and have no protruding screws or projections that might cause injury. Parts that passengers might be thrown on or against by action of the ride must be adequately padded to prevent or minimize the possibility of injury. The upholstery must be kept in repair, and no loose or flapping portions of upholstery or decoration are allowed.

(2) Propellers or other moving parts or decorations attached to tubs, cars, chairs, seats, gondolas, and other carriers must be securely fastened to this equipment and must be keyed or otherwise secured so that they cannot come off during operation of the ride. Vanes, canopies, or other attachments that might become disengaged must be secured with safety straps to prevent them from flying away in case of breakage or dislocation.

(3) If a device on a ride is shown to have a deficiency or require repairs in the ride's tubs, cars, chairs, seats, gondolas, or other carriers used, the ride will be considered

noncompliant as a whole and must not operate until returned to compliance based on the number of carriers on the device as follows:

(a) For devices with 10 or fewer carriers, the ride, as a whole, will be considered noncompliant and must not operate if 50% or more of the carriers are found deficient.

(b) For devices with more than 10 carriers, the ride, as a whole, will be considered noncompliant and must not operate if 25% or more of the carriers are found deficient.

(4) Subrule (3) of this rule does not apply to go-karts, bumper cars, bumper boats, or individual devices that can be removed or replaced as needed, including, but not limited to, train cars, log rides, or boat rides.

#### R 408.831 Safety retainers.

Rule 31. Tubs, cars, chairs, seats, gondolas, and other carriers used on a ride that depends on a single means of attachment or support must be equipped with a safety retainer to prevent the carrier, if it becomes disengaged from its support or attachment, from being catapulted from the ride and to prevent any action of the carrier that might throw the occupants from the carrier while the ride is in motion. This rule only applies to rides or situations determined to be hazardous after inspection by an authorized representative of the department and review of the conditions.

#### R 408.832 Permit-inspection decal.

Rule 32. (1) After a ride has been inspected and authorized for operation, the department shall issue a permit-inspection decal that must be affixed to a basic part of the ride structure in such a manner as to be readily accessible to the authorized inspector. The permit-inspection decal must display the identification number issued by the department for the individual ride and other information considered necessary by the department.

(2) If the ride is transferred to another owner or operator, sold, rebuilt or undergoes major alterations, it must be reinspected. After completion of the inspection, a new permit-inspection decal must be issued.

(3) If a ride is transferred to another owner or operator or is sold, the permit-inspection decal shall be obliterated by the owner or operator before the transfer or sale.

(4) If a permit-inspection decal is mutilated so that it is no longer legible, the operator shall notify the department and a new permit-inspection decal must be issued.

#### R 408.833 Rescinded.

#### R 408.839 Gravity rides.

Rule 39. In addition to complying with other applicable rules, gravity rides must comply with all of the following;

(a) The frequency of departure of carriers from the loading area must be controlled by a ride operator. The minimum distance or time between departures must be determined by the manufacturer or designer of the device.

(b) The ride must have an operator located at the loading area and an attendant at the unloading area.

(c) If the entire ride is not visible to the operator, then additional attendants shall be located at other stations along the ride to ensure complete surveillance of the entire ride.

Two-way communication must be provided between the operator and other attendants of the ride.

#### R 408.839a Waterslides.

Rule 39a. A waterslide that conveys passengers must, in addition to other applicable rules, comply with all of the following requirements:

- (a) Each waterslide must be designed and constructed to have a minimum safety factor of 2.
- (b) Each waterslide must be designed and constructed to retain the passengers within the waterslide during the ride.
- (c) At each loading area, a hard surface that is not earth and is reasonably level must be provided. The surface must be large enough to accommodate the intended quantity of passengers.
- (d) If the elevation of a loading surface of a waterslide is more than 12 inches above the elevation of an adjacent area, then guardrails must be installed on the exposed sides of the loading area.
- (e) A waterslide may terminate in a swimming pool or in a body of water such as a lake, river, stream, or artificial lake or reservoir. The design of the waterslide and its termination point must meet the requirements of the act and these rules.
- (f) If the landing area or runout of a waterslide is in a public swimming pool, the landing area or runout of the waterslide must be specified by the designer. Swimming in this area, other than to exit the flume, landing, or runout area, is prohibited.
- (g) If the landing area or runout of a waterslide is in an enclosed tank or in a pool used only to exit the waterslide ride, the landing area or runout must be specified by the designer. This landing area or runout is not a public swimming pool.
- (h) Each waterslide must have at least 1 attendant located at the loading area at all times when the ride is being operated for the use of the public. A waterslide attendant shall be trained, prepared, and capable of controlling the frequency of departure of passengers from the loading area. The design and operation of a loading area common to more than 1 course must allow an attendant to remain knowledgeable of the disposition of each passenger. One attendant is sufficient to dispatch riders on more than 1 course from a common loading area if a mechanical system or operational controls are used to regulate rider dispatch on each affected course.
- (i) There must be at least 1 attendant in the unloading area at all times when the ride is being operated for the use by the public. An attendant in an unloading area must be trained in cardiopulmonary resuscitation and must be trained, prepared, and capable of assisting any passenger exiting the waterslide. One attendant is sufficient to operate the termination point common to more than 1 water slide, if the owner or operator provides sufficient attendants in the unloading area to ensure that each attendant can scan the entire area that he or she is responsible for every 10 seconds and respond within the area within 20 seconds.
- (j) If the entire water slide is not visible to the attendant at the loading area or if the attendant is controlling entry to multiple courses, then some form of 2-way communication must be provided between the attendants of the ride to ensure that passenger loading is stopped if there are problems.

R 408.843 Rescinded.

R 408.844 Mechanical failure reports.

Rule 44. The owner or operator of a carnival-amusement ride shall report a major breakdown to the department within 24 hours after the occurrence of the incident by telephone or other means of immediate communication. The owner or operator shall confirm this report using the form provided by the department. This report must be forwarded to the department within 7 days after the occurrence of the reportable incident. After being advised of a major breakdown, the department may require that the scene of an accident or major breakdown, or both, be secured and not disturbed to any greater extent than necessary for removal of the deceased or injured individuals. The department may order an immediate inspection of the secured site and the ride must be released for repair and operation only after the inspection is completed.

R 408.848 Control and operation.

Rule 48. An operator shall have knowledge of the use and function of normal operating controls, signal systems, and safety devices applicable to the ride and of the proper use, function, capacity, and speed of the particular ride at all times that it is being operated. When the ride is shut down, provision must be made to prevent the ride from being operated by the public. An individual other than a trained operator shall not be permitted to handle the controls of a ride during normal operation, except where the ride is designed to be controlled by the passenger.

### PART 3. PROCEDURES

R 408.872 Emergency applications for permits to operate.

Rule 72. When an owner or operator has not previously intended to operate a ride in this state and has not made application for a permit to operate, the owner or operator, after confirming a booking in this state, shall notify the department and apply for a permit to operate. The notice must be given not less than 30 days before the book date. When an emergency booking makes the 30-day notice impossible, the owner or operator shall notify the department of the booking by telephone or other means of immediate communication and shall confirm this notice in writing. The director shall schedule and arrange for inspection of the rides and the issuance of a permit to operate in conjunction with the owner or operator to best serve the needs of both parties and the orderly administration of the act and these rules. If devices require inspection before operation, the owner or operator shall make every effort to arrive at a location within this state and set up the devices to be inspected.

R 408.874 Daily inspection.

Rule 74. A ride must be inspected and tested on each day it is intended to be used. This inspection must be made by an individual commissioned to perform such inspections by the director. Daily inspection and performance tests must be performed and recorded in a manner prescribed by the manufacturer or ASTM F-24 if manufacturer standards are unavailable, and must be certified by the individual commissioned to perform these

inspections. Physical or digital results of these daily inspection and performance tests must be maintained and available to the department for review. These inspection reports must be retained at the operation site until the next inspection is conducted by the director. An owner or operator shall not knowingly use, or permit to be used, a ride that is not properly assembled or is defective or unsafe in any of its parts, controls, or safety equipment.

#### PART 4. PARTICIPATORY RIDES - GO-KARTS

R 408.897 Remote idle system.

Rule 97. (1) Effective May 1, 2000, each go-kart must be equipped with a receiver for a remote idle system. A go-kart ride attendant shall control the remote idle system.

(2) If the remote idle system becomes inoperable and requires repair, then the track owner or operator shall make a written request to operate the go-kart rides until the repair is completed.