Chapter 120-3-27

Rules and Regulations for Amusement Ride Safety

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120-3-27-.01 Authority and Purpose.

(a) Pursuant to O.C.G.A. Section 25-15-1, the Office succeeded to all rules and regulations of the Department of Labor which were in effect on June 30, 2012, or were scheduled to go into effect on or after July 1, 2012, which related to the functions transferred to the Office pursuant to either Chapter 15 of Title 25 or Part 6 of Article 1 of Chapter 2 of Title 8. The Office has authority to modify the Boiler and Pressure Vessel regulations or promulgate new regulations pursuant to O.C.G.A. Sections 25-15-1, 25-15-53, 33-2-9 and 50-13-21.
(b) The primary purpose of these rules and regulations is to promote the safe assembly, disassembly, repair, maintenance, use, operation, and inspection of all amusement rides.

120-3-27-.02 Definition of Terms. Amended.

(1) “Annual Inspection” is the official inspection of a ride or device made by the Chief Inspector or his designee.
(2) “A.N.S.I.” means American National Standards Institute.
(3) “Approved” means acceptable to the Commissioner. Any product certified or classified, or labeled, or listed by a nationally recognized testing agency may be deemed to be acceptable, unless specifically banned by order of the Commissioner.
(5) Backwash — The process of thoroughly cleansing the filter media and elements by reverse flow.
(6) Backwash Cycle — The time required to thoroughly backwash the filter media and elements and the contents of the filter vessel on vacuum systems also the time to drain the filter element and washing of the medium.

(7) Backwash Rate — The rate of application of water through a filter during the cleaning cycle, normally expressed in U.S. gallons per minute per square foot of effective filter area.

(8) Cartridge — A replaceable porous element:
   (a) Depth-Type Cartridge: A filter cartridge, with media not less than 3/4 inch (.18 cm) thick, which relies on penetration of particulates into the media to achieve their removal and to provide adequate holding capacity for the cartridge.
   (b) Surface-Type Cartridge: A filter cartridge, with media less than 3/4 inch (.18 cm) thick, which relies on retention of particulates on the surface of the cartridge to achieve their removal.

(9) “Child” means a person 12 years of age and under.

(10) “Containing Device” means a strap, belt, bar, gate or other safety device designed to prevent accidental or inadvertent dislodgement of a passenger from a ride which does not actually provide physical support.

(11) “Commissioner” means the Commissioner of Labor of the State of Georgia or his authorized representative.

(12) Deck, Above Ground — Any structure that is on top of or adjacent to the outer edges of the landing pool wall that can support one or more persons in a sitting or upright position.

(13) Splash Pool Decks — Those areas surrounding a pool or flume which are specifically constructed or installed for use by sliders.

(14) “Department” means Georgia Department of Labor.

(15) Factor of Safety — The ultimate load divided by the safe load or the ultimate strength divided by the allowable stress.

(16) Filter — A device that separates solid particles from water by recirculating it through a porous substance.

(17) Filter Agitation — The mechanical or manual movement to dislodge the filter aid and dirt from the filter element.

(18) Filter Cycle — The operating time between cleaning or backwash cycles.

(19) Filter Element — A device within a filter tank designed to entrap solids and conduct water to a manifold collection header, pipe or similar conduit. Filter elements usually consist of a septum and septum support.
   (a) Permanent Filter Media: A finely graded material (such as sand or anthracite) which removes filterable particles from the water.
   (b) Filter Aid: A type of finely divided medium used to coat a septum type filter — usually diatomaceous earth, processed perlite, or similar material.

(20) Filtration Flow — The rate of flow, in volume per time (gpm, gph), through the filter system installed according to manufacturer’s instructions with new clean media.

(21) Filtration Rate — The rate of filtration of water through a filter during the filter cycle expressed in U.S. gallons per minute per square foot of effective filter area.

(22) Floor — The interior bottom surface of the splash pool, consisting of that surface from a horizontal plane up to a maximum of a 46 degree slope.

(23) “Guardian” means a person 16 years of age and over.
(24) “Guardian Restriction” means a condition placed on a major ride where a passenger must be accompanied on the ride by a guardian.

(25) JTU — Jackson Turbidity Unit, a means of measuring water clarity. (26) Loads — Loads are classified as static and dynamic static loads are forces that are applied slowly and then remain nearly constant. One example is weight or dead load. Dynamic loads are forces that vary with time.

(27) “Major Alteration” means a change in the type or capacity of an amusement ride or amusement device or a change in the structure or mechanism that materially affects its functions or operation. This includes, but is not limited to changing its mode of transportation from non-wheeled to a truck or flat-bed mount, and changing its mode of assembly or other operational functions from manual to mechanical or hydraulic.

(28) “Major Breakdown” means a stoppage of operation resulting from damage, failure, or breakage of a stress bearing part of a ride or device.

(29) Pinching Hazard — Any configuration of components that would pinch or entrap the fingers or toes of a child or adult.

(30) Primary Structural Members — Any part of the flume or pool structure that carries or retains any static load or stress caused by water pressure or structure weight.

(31) Puncture Hazard — Any surface or protrusion that would puncture a child’s or an adult’s skin under casual contact.

(32) Recessed Steps — A riser/tread or series of risers/treads extending down from the deck with the bottom riser/tread terminating at the landing pool wall, thus creating a “stair well”.

(33) Recessed Treads — A series of vertically spaced cavities in the landing pool wall creating step holes.

(34) Removable — Capable of being taken away from the main unit with the use of only simple tools, such as a screwdriver, pliers, or wrench.

(35) “Ride Action” — A term which shall be used to describe the movements and/or motions of an amusement ride which are generated for amusement purposes; and/or the bodily actions/reactions experienced by the passengers which are a result of the said movements/motions. Bodily actions/reactions which are a result of the commission of an act(s) of malicious negligence and/or horseplay shall not be construed as resultant of ride action.

(36) “Ride Operator” means any person or persons actually engaged in or directly controlling an amusement ride.

(37) “Rope”, “Wire Rope” and “Cable” are interchangeable, but not interchangeable with the terms for fiber rope and manila rope.

(38) “Safety Factor” or “Factor of Safety” means ratio of the ultimate load for a member or part to the allowable or working load for a member or part.

(39) “Safety Retainer” means a secondary safety wire rope, bar attachment or other device designed to prevent parts of an amusement ride or amusement attraction from becoming disengaged from the mechanism or from tipping or tilting in a manner to cause hazard to persons riding on, or in the vicinity of, an amusement ride or amusement attraction.

(40) Safety Walls — That part of the flume designed to keep a slider within the geometric confines of the flume.

(41) Secondary Structural Members — Any part of the flume or pool structure that is not
subjected to a load caused by water pressure or structure weight (that is, ridgidizing members).

(42)(a) “Serious Personal Injury” means death, dismemberment, visible significant disfigurement, visible significant or permanent loss of use of a body organ, member, function or system, compound fractures, visible uncontrolled bleeding, heart attack, stroke, or unconsciousness likely attributable to trauma to the head, as a result of the operation or malfunction of an amusement ride.

(b) “Personal Injury” means sustained bodily harm resulting in medical treatment such as trauma, cuts, bruises, burns and sprains, but does not include Minor Injury/Illness or any mental disease or disorder not accompanied by physical injury at the time of the incident, and further does not include false arrest, detention, imprisonment, confinement, slander, libel, violation of privacy or mental distress.

(c) “Minor Injury/Illness” means physical or mental incidents such as fainting, bruising, or minor lacerations for which treatment is limited to rest, cleansing, dispensation of over-the-counter medication, plastic adhesive bandage strips, fluids by mouth, or similar assistance.

(d) “Property Damage” means physical injury to, or destruction of tangible property to the structure or operational parts (including safety equipment and devices) of an amusement ride, sustained by reason of accident or malfunction, other than routine wear and tear, but does not include damage to personal property.

(43) Septum — That part of the filter element consisting of cloth, wire screen, or other porous material on which the filter medium or aid is deposited.

(44) “Shall” means a mandatory requirement.

(45) Shallow Areas — Portions of a pool ranging in water depth from 3 feet (91 cm) to 5 feet (1.52 m).

(46) Splash Pool — A landing pool at the end of the slide from which bathers exit to the deck.

(47) Stress — Force per unit of area.

(48) Top Pool (or Starting Pool) — A shallow trough or pool at the top of the slide wherein the slider begins his or her descent.

(49) Toxic — Having an adverse physiological effect on humans.

(50) Tread Contact Surface — Foot contact surfaces of ladder, step, stair, or ramp.

(51) Turnover — The period of time (usually in hours) required to circulate a volume of water equal to the volume of water in the landing pool.

(52) Wall — That structure that supports the landing pool liner or the surface of a flume that is within 45 degrees of vertical.

(53) Wall Closure — The fastening device that connects the flume wall ends.

(54) “Water Amusement Ride” is an amusement ride or attraction which utilizes water as the primary entertainment medium, and moreover, the customer is either fully or partially immersed in water.

(55) Water Line — The water line is defined in one of the following ways:

(a) Skimmer System — The water line shall fall in the midpoint of the operating range of the skimmers.

(b) Overflow System — The water line shall be established by the height of the overflow rim.

(56) “Water Flume” — A sloped trough-like or tubular structure of varying slope and
direction usually made of fiberglass or coated concrete which utilizes water as a lubricant and/or the method of regulating rider speed.


### 120-3-27-.03 Administration.

(1) The Safety Engineering Section of the Safety Fire Division of the Office of the Insurance and Safety Fire Commissioner administers the provisions of Chapter 15 of Title 25 of the Official Code of Georgia Annotated relating to Amusement Ride Safety. The Safety Engineering Section is located at 2 Martin Luther King Jr. Drive, Suite 920, West Tower, Atlanta, GA 30334.

(2) Address correspondence to:

Office of Insurance and Safety Fire Commissioner
Safety Engineering Section
2 Martin Luther King Jr. Drive, Suite 920, West Tower
Atlanta, GA 30334

Authority O.C.G.A. Sec. 25-15-53. **History.** Original Rule entitled “Administration” was filed on March 19, 1986; effective April 8, 1986.

### 120-3-27-.04 Rules; Regulations; Rider Responsibility; Warnings and Signage.

(1) Every owner, ride operator and the public using an amusement ride shall comply with these rules and regulations as they apply.

(2) An amusement ride which is not in compliance with this Chapter shall not be used or occupied.

(3) Where only individual units of a ride, such as cars, seats, or other carriers are defective and not in compliance with this Chapter, such units shall be taken out of service and clearly marked with a red tag reading “Out of Service”; provided, however, such defects do not jeopardize the safety of the entire ride.

(4) The Chief Safety Engineer or his designee, upon presenting credentials to the owner/operator, is authorized without prior notice to inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and manner, any establishment, assembly area, or other area where amusement rides or amusement attractions are assembled or are in use.

(a) Inspection includes, but is not limited to, a review of necessary documents, observance and/or inspection of ride assembly or setup.

(b) Inspection of the ride is to include; foundation, blocking, fuel containers, mechanical condition and safe operation of the ride.

(5) Recommended passenger restrictions and limitations, where applicable, such as but not limited to, height, weight, age, passenger placement, or other appropriate restrictions shall be provided to the end user by the manufacturer or seller of the amusement ride or device. In the event the manufacturer is unwilling or unable to provide said restrictions, thereby rendering himself in non-compliance with this Law and A.S.T.M. Standards, the
said restrictions and/or limitation must be established by the owner and/or manager and shall be acceptable to the Office.

(6) The Commissioner or his designee in accordance with (5) above shall maintain a list containing approved height restrictions for major rides.

(7) All ride patrons shall:
(a) Obey all posted signs, including but not limited to, warning signs, instruction signs, and directions signs, which are not inconsistent with these rules;
(b) Obey the instructions of ride attendants;
(c) Properly use all safety equipment provided;
(d) Act in a responsible manner while using an amusement ride, device or attraction;
(e) Refrain from acting in any manner that may cause or contribute to injury to self or others;
(f) Not participate or use an amusement ride, device or attraction while under the influence of alcohol or any intoxicating substance; and
(g) Be subject to any or all of the following penalties for violation of this Section A:
   1. Removal from the ride, device or attraction and barred from returning that day;
   2. Removal from the amusement owner’s property and barred from returning that day;
   3. Subject to a civil penalty up to a maximum of $100 per infraction to be assessed in accordance with the civil penalty provisions of these rules.

(8) All ride patrons, if the patron is a minor, the patron’s parent or guardian, shall report in writing to the amusement owner or his designee any injury sustained on an amusement ride prior to leaving the amusement owner’s premises, unless the ride patron (or parent or guardian) is unable to file the report because of the severity of the injuries, in which case the report shall be filed as soon as reasonably possible.

(9) Sign Requirements:
(a) Warnings and directions shall be based upon the standards of the American Society of Testing Materials (ASTM) or the American National Standards Institute (ANSI), or, if expressly approved by the Commissioner, other nationally recognized technical or scientific authority in the amusement ride or carnival ride industry.
(b) Signs shall be displayed in a public and conspicuous place on or near the ride, device or attraction in letters clearly visible from at least a distance of 15 feet.
(c) Rider responsibilities and potential penalties shall be posted in at least one public and conspicuous location on the premises of the amusement owner.


120-3-27-.05 Prohibited Use. Amended.

(1) The Office shall order in writing, a temporary cessation of operation of an amusement ride, if it has been determined after inspection to be hazardous or unsafe. Operation shall not be resumed until such conditions are corrected to the satisfaction of the Office.
(2) No person shall knowingly use or permit to be used, an amusement ride which is not properly assembled or which is defective or unsafe in any of its parts, components, controls, or safety equipment.
(3) No amusement ride, exclusive of water amusement rides, manufactured after January 1, 1986, shall be placed in service unless:
(a) It complies with ASTM Standard F698-83.
(b) The manufacturer supplies the owner with a manual containing the operation procedures established by ASTM Standard F770-82.
(c) The manufacturer certifies that the ride has been tested to the standards established by ASTM Standard F846-83.
(d) The manufacturer supplies the owner with a maintenance procedures manual as established by ASTM Standard F853-85.
(e) At which time provisions are made for, and adopted by ASTM Standards pertaining to amusement rides, said standards shall be applicable to water amusement rides immediately upon adoption and approval of said standards.
(4) During a lightning storm, a period of tornado alert or warning, or fire, or when violence, riot, or other civil disturbance occurs or threatens in an amusement park, or in an area adjacent thereto, passengers shall be unloaded or evacuated from the ride and the ride shall be shut down and secured immediately. Operation shall not resume until the situation has returned to a normal, safe operation condition.
(5) Exemptions: The following rides or attractions are exempted from the provisions of this Act:
(a) Unpowered, nonmechanized playground equipment including, but not limited to: swings, seesaws, slides, stationary springmounted animal features, jungle gyms, rider - propelled merry-go-rounds, climbers, trampolines, moon walks and live rides, zip lines, and inflatables.
(b) Any single passenger manually, mechanically, or electrically operated, coin-actuated ride, which is customarily placed singly, or in groups, in a public location and which does not normally require the supervisions or services of an operator.
(6) An amusement ride which is exposed to wind or storm with lightning or wind gusts above that recommended by the manufacturer, shall not be operated except to release or discharge occupants.
(7) If the inspector finds that an amusement ride presents an imminent danger he will attach to such ride a red tag reading “Out of Service” and secure said ride. Such notice shall not be removed until the ride is made safe and then only by the inspector issuing the red tag.
(8) The amusement ride shall not be used while the inspector’s out of service red warning tag is posted.


120-3-27-.06 Medical and First Aid, Fatalities, Personal Injury, and Accidents. Amended.
(1) Medical and First Aid. The owner and operator shall ensure the availability of medical aid.
(a) While the venue is open or has patrons on the site, in the absence of an infirmary, clinic, or hospital available adjacent to the site or within one-half mile of the rides and attractions, one or more adequately trained and certified individuals shall be available on premises at all times with appropriate skills to render first aid and cardiopulmonary resuscitation. In addition, first aid supplies recommended and approved by the American Red Cross or by a consulting physician shall be readily available.
(b) At the site office or other appropriate place, the telephone numbers for physician, hospital, ambulance and local fire and police services shall be conspicuously posted for use by the staff and public in the event of emergency.
(2) Accidents involving fatalities or serious personal injury. In the event of an accident involving fatalities, serious personal injury, or personal injury requiring inpatient overnight hospitalization, and of which the owner or operator has knowledge (Authority: O.C.G.A. §25-15-61):
(a) The ride or activity shall be shut down and immediately taken out of service;
(b) The ride or activity shall be secured to prevent operation until the Office has conducted a full investigation; and
(c) The accident shall be immediately reported to the Office by telephone, and shall be augmented by a detailed written report submitted by certified mail or similar means not later than the close of the next business day following the accident.
(d) If at the time of the telephonic report, the owner or operator and a qualified repair technician present sufficient information to the Office, the Office may, in its discretion, permit the ride or activity to be promptly repaired and put back into service without an investigation and inspection. The Department shall make a record of such decision and record it upon the written report submitted concerning the accident.
(3) Accidents in which further safe operations may be compromised. In the event of an accident involving either personal injury or property damage and of which the owner or operator has knowledge in which there is a discernible risk that further safe operation of the ride or activity may be compromised (Authority: O.C.G.A. 25-15-53):
(a) The ride or activity shall be shut down and immediately taken out of service;
(b) The ride or activity shall be secured to prevent operation until the Office has conducted a full investigation; and
(c) The accident shall be immediately reported to the Office by telephone, and shall be augmented by a detailed written report submitted by certified mail or similar means not later than the close of the next business day following the accident.
(d) If, at the time of the telephonic report, the owner or operator and a qualified repair technician present sufficient information to the Office, the Department may, in its discretion, permit the ride or activity to be promptly repaired and put back into service without an investigation and inspection. The Office shall make a record of such decision and record it upon the written report submitted concerning the accident.
(4) All other accidents or incidents. In order to evaluate the overall safety of regulated rides and activities, and to permit the identification of trends which may permit the effective prevention of accidents, all other accidents and incidents involving personal injury or property damage, but not including minor personal injury/illness, sustained by reason of the operation or malfunction of a ride or activity shall be reported as follows
(Authority, O.C.G.A. Sec.25-15-53):
(a) The accident or incident shall be reported in writing to the Office within 30 days of the accident or incident, or within 30 days after the owner or operator knows a belated report of personal injury. In the alternative, such reports may be accumulated and submitted on a monthly basis.
(b) The report shall summarize the accident or incident; shall note any equipment repair or adjustment accomplished; and shall include any witness statements taken.


120-3-27-.07 Inspection Fee and Permit. Amended.

(1) Before commencing operations in 1986 and in each year thereafter, an owner shall make application to the Office containing information as required by the Office. The application, when filed, shall be accompanied by a certificate of insurance, bond, or other security indicating that the owner has complied with the Amusement Rules and Regulations for the State of Georgia.
(2) No amusement ride or amusement park ride or slide shall be operated without a permit, except that a ride covered by a valid permit to operate for the preceding year may continue to operate for the current year, until reinspected. This carry-over permit shall be known as a temporary permit.
(3) All stationary amusement rides and amusement park slides shall be inspected by the Office before they are originally put into operation for the public’s use and thereafter at least once every year, unless authorized to operate on a temporary permit.
(4) Upon receiving an application there will be a one-time charge of $50.00 for processing of the permit.
(5) The Office shall charge an annual inspection fee of $65.00 for each slide, aerial lift or amusement ride.
(6) After inspection, if the amusement ride is found to comply with this Chapter, the Office shall authorize the ride for use by the public provided the inspection fee has been paid.
(7) No amusement ride shall be used at any time or location unless prior notice of intent to use the same has been given to the Commissioner.
(8) Notice of planned schedules shall:
(a) Be in writing;
(b) Identify the ride;
(c) State the intended dates and location of use; and
(d) Be mailed to the Office of Insurance and Safety Fire, Safety Engineering Section on or before January 1 of each year, on a form furnished by the Office.
(e) In the event a special inspection is made, an additional fee of $75.00 per hour and all traveling expenses incurred in connection with the inspection will be charged.
1. The expenses shall be governed by the regulations for traveling expenses established for state officials. In cases where a trip is made to inspect two or more parties, the traveling expenses shall be prorated between the parties on the basis of time and expenses
incurred for each inspection.

2. A special inspection is any non-routine inspection which includes but is not limited to:
   (i) Failure to report a schedule change after scheduling an inspection.
   (ii) All violation follow-up inspections which require a special trip to verify compliance.
   (iii) Scheduling an inspection with less than 72 hours notice.

9) A copy of the permit issued by the Office shall be continuously displayed at the entrance to the park when the ride is in use. The permit shall be encased in such a manner as to be protected from weather conditions. Duplicate of such permits shall be issued by the Office.

10) The owner of an amusement ride shall notify the Commissioner when ownership is transferred to another owner. In such a case, the new owner shall obtain a new permit.


120-3-27-.08 Insurance, Bond or Other Security. Amended.

(1) No person shall operate a ride unless at the time, there is in existence:
   (a) A policy of insurance in an amount not less than (one million dollars) $1,000,000 insuring the owner or operator against liability for injury to persons arising out of the operation of the amusement ride; or
   (b) A bond in a like amount provided, however, that the appropriate liability of the surety under such bond shall not exceed the face amount thereof; or
   (c) Cash or other security acceptable to the Office.

(2) The policy shall be procured from one or more insurers acceptable to the Office.


120-3-27-.09 Operation, Amusement Rides.

(1) The ride operator shall be at least 16 years of age.
(2) The ride operator shall operate no more than one mechanical ride at any given time as provided by the A.S.T.M. Standards or manufacturers specifications.
(3) The ride operator shall be properly trained before he is assigned the duties of operating a ride.
(4) The ride operator shall have knowledge of the use and function of all normal and emergency operating controls and the proper use of the ride.
(5) The ride operator shall be in the immediate vicinity of the amusement ride operating controls at all times during normal operations of the ride. This Rule shall not be construed to prohibit passengers from using amusement ride operating controls designed for use by a passenger.
(6) The ride operator shall exercise reasonable control over the amusement ride to prevent dangerous actions by passengers.
(7) The ride operator shall watch for apparent impending mechanical failures of the
amusement ride.
(8) The ride owner of an amusement ride shall insure that his or her ride is operated in a manner which precludes foreseeable mischievous use of the ride.
(9) The ride operator shall not operate any ride when under the influence of drugs or alcohol.
(10) The ride operator or maintenance personnel shall lock-out the electrical disconnect switch when restoration of electrical power to an amusement ride could create a hazard to persons during the performance of maintenance, repair, inspection, or an emergency evacuation of passengers and insure that it remains locked-out until such time that restoration of power will not create a hazard.
(11) An amusement ride shall not be overcrowded or loaded in excess of its safe carrying capacity.
(12) Amusement rides shall not be operated at an unsafe speed or at any speed beyond that recommended by the manufacturer.
(13) Signal systems for the starting and stopping of amusement rides shall be provided where the operator of the ride does not have a clear view of the point at which passengers are loaded or unloaded.
(14) Any code of signals adopted for the operation of any amusement ride shall be printed and kept posted at both the operator's and the signalman's stations. All persons who use these signals shall be carefully instructed in their use.
(15) Signals for the movement or operation of an amusement ride shall not be given until all passengers and other persons who may be endangered are in a position of safety.
(16) Voice communication shall be provided between the ride operators at the entrance, intermediate points and the termination of an amusement ride where voice communication could provide improved control of the ride by reducing a hazardous condition created by distance or lack of visibility between these points.
(17) Where a ride exposes a passenger to high speed, substantial centrifugal force or a high degree of excitement, the owner shall post a conspicuous warning sign at the entrance to the ride advising the public of risk to passengers.
(18) The sign required by (17) above shall be at least two feet by two feet in sharply contrasting colors.
(19) The sign required by (17) above shall read as follows or express an equivalent warning:
(a) The following people should not ride this ride:
1. Those with heart conditions;
2. Pregnant women;
3. Those with back ailments.
(20) The owner or ride operator shall have the right to refuse any member of the public admission to a ride if his bearing or conduct will endanger himself or other members of the public.
(21) The owner or ride operator shall have the right to refuse admittance to any ride if the intended passenger's health or physical condition makes it unsafe for him to use the ride.
(22) The owner or ride operator shall refuse a passenger seeking admission to a major ride if the passenger cannot meet a guardian or height restriction if the ride is subject to such a restriction. Legible signs to this effect shall be posted in full view of the public seeking admission to rides.
(23) The owner or ride operator of an amusement ride shall not permit a person obviously under the influence of alcohol or narcotics to be admitted to any amusement ride.
(24) A suitable number of containers shall be provided in and around amusement rides. Excessive accumulations of trash or refuse shall be promptly removed.
(25) All parts of amusement devices and temporary structures used by passengers or customers shall be maintained in a clean condition.

Authority O.C.G.A. Sec. 25-15-60 Administrative History. Original Rule entitled "Operation, Amusement Rides" was filed on March 19, 1986; effective April 8, 1989.

120-3-27-.10 Maintenance and Inspection Records.

(1) The owner shall retain at all times up-to-date maintenance records for each amusement ride.
(2) These records shall contain the following information:
   (a) Date and nature of all inspections;
   (b) Any violation of the rules and type of action taken to rectify the violation;
   (c) All breakdowns or repairs of any major mechanical part.
(3) Maintenance of equipment shall be in accordance with this Chapter; and any replacements thereof shall be in conformity with this Chapter. Only those bolts of grade 5 or better will be used except where stronger grade bolts are required by manufacturer.
(4) Repairs: In accordance with manufacturers recommendations only those procedures acceptable will be allowed.
(5) An amusement ride shall be inspected and tested on each day when it is intended to be used. The inspection and test shall be made by a qualified person experienced and instructed in the proper assembly and operation of the device and shall be performed before the ride is put into normal operation.
(6) The inspection and test shall include the operation of control devices, speed-limiting devices, brakes and other equipment provided for safety.
(7) All amusement rides shall have an operating manual. The owner of an amusement ride shall operate the ride in accordance with the manufacturer's operating manual. In the absence of a manufacturer's operating manual, the owner shall write an approved operating manual. Where any conflict occurs between the operating manual and this Chapter, this Chapter shall prevail. The operating manual shall be kept with the amusement ride and shall be available for use by the office of Safety Engineering at all times.
(8) Welding of parts upon which safe operation depends, will be in accordance to AWS Standards welding & brazing procedures done by welders qualified to those procedures, procedures shall be provide by the manufacturer.
(9) The requirements for welding procedures and welder qualifications use, AWS D1.1, D1.2, D1.3, D1.6 and C3.4 (American Welding Society Standards for the welding of steel, aluminum, sheet metal and stainless steel and torch brazing.)


120-3-27-.11 Rebuilt and Modified Rides.
If an amusement ride is materially rebuilt or so modified as to change its original action:
(a) The ride shall be re-identified by a different name or identification number or both;
(b) The ride shall be subject to all other provisions of this Chapter as if it were a new ride not previously used.


120-3-27-.12 Assembly and Disassembly.

(1) The assembly and disassembly of an amusement ride shall be done by or under the supervision of a qualified person.
(2) Assembly work shall be performed in a proper and workmanlike manner. Parts shall be properly aligned and shall not be bent, distorted, cut or otherwise injured to force a fit. Parts requiring lubrication shall be lubricated in course of assembly. Fastening and locking devices, such as bolts, cap screws, cotter pins and lock washers shall be installed where required for safe operation. Nuts shall be drawn tight, cotter pins shall be spread and lock nuts firmly set.
(3) Parts which are excessively worn or which have been materially damaged shall not be used. Close visual inspection of parts shall be made during assembly to discover such wear or damage and immediate inspection of fastening devices shall be made after assembly to assure that they have been properly installed.
(4) Persons engaged in the assembly or disassembly of amusement rides shall be provided with and shall use tools of proper size and design to enable the work to be done in a proper manner. Broken, damaged and unsuitable tools shall not be used.
(5) Assembly and disassembly of amusement rides shall be done under light conditions sufficient to permit the work to be properly performed and inspected.
(6) A sufficient number of persons to do the work properly shall be engaged for the assembly or disassembly of amusement rides. Persons not so engaged shall be prevented from entering the area in which the work may create a hazard.
(7) The owner of an amusement ride shall comply with the manufacturer's construction manual for the assembly and disassembly of the ride. The manufacturer's construction manual shall be kept with the amusement ride and shall be available for use by the Safety Engineering Section.


120-3-27-.13 Manufacturer's Information.

(1) No new amusement ride shall be placed in service unless the following information as applicable is provided to the ride owner by the manufacturer of the ride.
(2) The required information shall be legibly impressed on a metal plate or equivalent and readily visible at the appropriate ride.
(a) A manufacturer's unique serial number or code affixed to the ride in a permanent fashion;
(b) A manufacturer's unique serial number or code assigned to each manufactured ride type of the same structural design or components;
(c) The date (month, year) that the given ride met the manufacturer's required construction specifications;
(d) The maximum revolutions per minute, the maximum feet per second, or miles per hour;
(e) The capacity of the ride in terms of total passenger weight or the number of passengers;
(3) Water ride data plates shall contain a location number of the ride or flume and the maximum dispatch time interval.
(4) The ride owner shall maintain all of the information described in (2) above and make it available to the Commissioner upon his request.
(5) Where any conflict occurs between the manufacturer's information or recommendations of (2) above and other provisions of these rules, the other provisions of this Chapter shall prevail.


120-3-27-.14 Brakes and Stops.

(1) On an amusement ride or amusement attraction where coasting renders the operation dangerous, either during the period while the ride or attraction is being loaded or unloaded or in the case of power failure or other unforeseeable situation a method of braking shall be provided.
(2) If cars or other components of an amusement ride or amusement attraction may collide in such a way as to cause personal injuries upon failure of normal controls, emergency brakes sufficient to prevent these collisions shall be provided in accordance with the manufacturer's design.
(3) On amusement rides or amusement attractions which make use of inclined tracks, automatic anti-rollback devices shall be installed to prevent backward movement of the passenger carrying units in case of failure of the propelling mechanism.


120-3-27-.15 Internal Combustion Engines.

(1) Internal combustion engines for amusement rides shall be of adequate type, design and capacity to handle the design load.
(2) Where fuel tanks of internal combustion engines for amusement rides are not of adequate capacity to permit uninterrupted operation during normal operating hours, the amusement ride shall be closed down and unloaded or evacuated during the refueling procedure. The fuel supply shall not be replenished while the engine is running.
(3) Where an internal combustion engine for an amusement ride is operated in an enclosed area, the exhaust fumes shall be discharged to the outside.
(4) Internal Combustion engines for amusement rides shall be located to permit proper
maintenance and shall be protected by guards, fencing or enclosure.


120-3-27-.16 Wire Rope.

(1) Wire rope on amusement rides shall be thoroughly examined periodically. Wire rope found to be damaged shall be replaced with new rope of proper design and capacity as per the manufacturer's data tag. Any of the following conditions shall be cause for rope replacement:
(a) In running ropes, six randomly distributed broken wires in one rope lay or three broken wires in one strand in one rope lay.
(b) In pendants or standing ropes, evidence of more than one broken wire in one rope lay.
(c) Abrasion, scrubbing or peening causing loss of more than 1/3 of the original diameter of the outside diameter of the outside individual wires.
(d) Severe corrosion.
(e) Kinking, crushing, birdcaging, or other damage resulting in distortion of the rope structure.
(f) Heat damage.
(g) Reduction from normal diameter of more than 3/64 inch for diameters up to and including 3/4 inch, 1/16 inch for diameters 7/8 inch to 1 1/8 inches, 3/32 inch for diameters ¼ inches to 1 ½ inches.
(h) Birdcaging or other distortion resulting in some members of the rope structure carrying more load than others.
(i) Noticeable rusting or development of broken wires in the vicinity of attachments. When this condition is localized in an operational rope, it may be eliminated by making a new attachment.
(2) Wire ropes used to support, suspend, bear or control forces and weights involved in the movement and utilization of tubs, cars, chairs, seats, gondolas, other carriers, the sweeps, or other supporting members of an amusement ride shall not be lengthened or repaired by splicing except by a licensed cable splicer for aerial tramways.


120-3-27-.17 Hydraulic Systems.

(1) Hydraulic systems and other related equipment used in connection with amusement rides shall be free of leaks and maintained to ensure safe operation at all times.
(2) An amusement ride which depends upon hydraulic pressure to maintain safe operation shall be provided with a positive means of preventing loss in hydraulic pressure that could result in injury to a passenger.
(3) Hydraulic lines shall be guarded so that sudden leaks or breakage will not endanger the passenger or the public.
120-3-27-.18 Pressure Vessels, i.e., Vacuum Tanks.

(1) Air compressor tanks, storage tanks and appurtenances used in connection with amusement devices shall be designed and constructed in accordance with Section VIII of the ASME Code; and shall also be equipped and maintained to ensure safe operation.

(2) Air compressor tanks and other receivers used in connection with air compressors shall comply with the Rules of the National Board Inspection Code of the Boilers and Pressure Vessel Code.

(3) Air compressor tanks and other air receivers used in connection with air compressors shall be inspected operationally at least once a year and internally when considered necessary by a qualified inspector and a record of each inspection shall be kept.

(4) Air compressor tanks and other air receivers used in connection with air compressors shall have the maximum allowable working pressure conspicuously marked thereon.

Authority O.C.G.A. Sec. 25-15-59. Administrative History. Original Rule entitled "Pressure Vessels, i.e., Vacuum Tanks" was filed on March 19, 1986; effective April 8, 1986.

120-3-27-.19 Passenger Tramways.

(1) Aerial Passenger Tramways, ANSI B77.1 — 2011 and addendum to Aerial Passenger Tramways, ANSI B-77.1a — 2012 are hereby adopted as a rule with the modifications as indicated below.

(a) Each owner engaged in passenger tramway operations shall protect the public by complying with ANSI B-77.1 and B-77.1a.

(b) Where any conflict occurs between the rule referenced in (1) above and any other rule in this Chapter, the latter shall prevail.


120-3-27-.20 Electrical Equipment.

(1) The National Electrical Code, NFPA 70 1984, latest adopted version is hereby adopted as a rule and all future amendments shall be accepted as adopted.

(2) This document may be purchased from the National Fire Protection Association, Battermarch Park, Quincy, MA 02269.

(3) All electrical wiring and equipment used for amusement rides or for lighting shall be installed and maintained in accordance with the Rule adopted in (1) above.

(4) The outlets of electrical power lines carrying more than 120 volts shall be clearly marked to show their voltage.

(5) All electrical transformer substations shall be properly enclosed and proper warning signs shall be posted.

(6) Electrical wiring and equipment located outdoors shall be of such quality and so constructed or protected that exposure to weather will not interfere with its normal
operation.
(7) Elevated power lines crossing access or other roads within the grounds of a carnival
or amusement park shall be so suspended as to provide a vertical clearance of at least
twelve feet from the road surface or three feet above any vehicle used within the grounds
of a carnival or amusement park. A horizontal clearance of at least three feet shall be
provided on each side of the normal passage space of vehicles.

was filed on March 19, 1986; effective April 8, 1986.

120-3-27-.21 Grounding.

(1) No overcurrent protection device shall be installed in neutral or grounding
conductors.
(2) Where electrical power is supplied for an amusement ride by a generating system, the
generator and all equipment shall be properly grounded.
(3) All receptacles and attachment plugs shall be of the grounding type.
(4) Each electrically powered amusement ride shall be effectively grounded. The
grounding shall be made effective as to all non-current carrying metal parts which may
become energized and which are exposed to contact by any persons.
(5) Grounding which does not have a resistance to ground of 25 ohms or less shall be
augmented by one additional electrode of any of the types specified in Section 250-53 of
the Rule referenced in Rule 120-3-27-.21.

Authority O.C.G.A. Sec. 25-15-59. Administrative History. Original Rule entitled "Grounding" was filed on
March 19, 1986; effective April 8, 1986.

120-3-27-.22 Construction.

(1) An owner/operator shall furnish a certified stress analysis and other pertinent data
deemed necessary by the Office for new, redesigned and all existing rides for which
this information may be requested. Such stress analysis is and other data pertinent to the
design, structure, factors of safety or performance characteristics shall be acceptable to
the Office. Failure of owner/operator to submit the requested information shall be
cause for the Chief Safety Inspector to deny issuance of a permit to operate.
(2) Structural materials and construction of rides shall conform to established engineering
practices, procedures, standards and specifications. If a designer or manufacturer of
equipment wishes to use materials not covered by these regulations or by reference to
existing standards, such information concerning these materials or methods shall be
submitted to the Office. The design details, materials and construction features shall
provide safety factors acceptable to the Office.
(3) All amusement rides shall be designed, constructed and installed so as to withstand
any normal stresses to which they may be subjected.
(4) Before being used by the public, amusement rides shall be placed or secured with
blocking, cribbing, outriggers, guys or other means necessary to be stable under all
operating conditions.
(5) All amusement rides, such as, but not limited to, passenger tramways, where restoration of electrical power could create a hazard, shall be provided with a main disconnect switch capable of being locked only in the "Off" position.
(6) The path of travel of an amusement ride shall have a clearance adequate to ensure that a passenger on the ride cannot be injured by contacting any structural member or other fixed object when the passenger is in the riding position.
(7) All amusement rides, buildings, tents or trailers excluding water flumes with enclosed sides used for amusement assembly shall be provided with emergency lighting fixtures clearly marking exit routes with suitable lighting to allow safe exit from same in the event of a power failure or fire.
(8) Location. General layouts shall be established so that continuous traffic patterns will exist. Box canyons formed by rides and attractions or concession booths may not be located immediately in front of hazardous equipment. The layouts shall be such to prevent traffic patterns through the concession booth back yards. The intermingling of water lines and electrical lines shall be avoided. Long guy wires or narrow braces utilized for ride, attraction or booth support shall be clearly marked with streamers or other devices to attract attention when located in traffic patterns.
(9) All structures used in connection with amusement rides shall be so designed and constructed as to carry safely all loads to which such structures may normally be subjected.


120-3-27-.23 Means of Access and Egress.

(1) Safe and adequate means of access and egress from amusement rides shall be provided.
(2) At least two means of egress remote from each other shall be provided from each floor, tier, room or balcony in structures which house amusement rides.
(3) Access to the means of egress shall be marked by readily visible signs in all cases where the egress is not immediately visible to the passengers.
(4) No egress shall be less than 22 inches in width.
(5) The width of a stairway shall be taken as the length of the treads between the stringers. The width of a doorway shall be taken as the width of the door.
(6) The maximum travel distance from the most remote point in any room or enclosed space to an open safe outside space shall be not greater than that listed below:
   (a) 100 feet in unsprinklered construction;
   (b) 150 feet in sprinklered construction; and
   (c) 25 feet in dead ends.
(7) Means of access and egress shall have protection from adjacent hazards and protection from falling by use of rails, enclosures, barriers or similar means.
(8) Means of access and egress shall be free from debris, obstructions, projections, slipping, tripping and other hazards.
(9) The head clearance in passageways shall not be less than seven feet.
(10) Means of access or egress shall have either stairways or ramps and connecting
landings or platforms where the public enter or leave an amusement ride that is above or below grade.

(11) Stairways, passageways, ramps, landings, or platforms shall be not less than 22 inches in width for single lane passages or 44 inches width for double lane passages. Landings or platforms shall not be less than three feet long measured in the direction of travel.

(12) Stair treads shall be at least eight inches deep exclusive of nosing and the height of rise shall not exceed eight inches. Between any two connecting levels the treads shall be of uniform depth and the risers shall be of uniform height.

(13) Handrails shall be provided on both sides of all stairways of four or more risers connecting adjoining levels whose difference in elevation is 30 inches or more.

(14) Handrails shall be provided on both sides of landings, platforms or ramps 30 inches or more above grade.

(15) Handrails shall be at least 30 inches above the ramp surface or nose of step and 42 inches above the landings.

(16) The distances between handrails shall not be less than 18 inches for a single lane passage and 36 inches for a double lane passage.

(17) Two intermediate rails spaced equally apart or equivalent construction to prevent a passenger from falling through shall be provided with all handrails.

(18) Stairways and ramps requiring handrails in accordance with (13) and (14), which are more than eight feet wide, shall be provided with railings dividing the widths into not more than eight feet and not less than the widths of (11) above.

(19) When ride entrances are provided, ride entrances shall have a passenger waiting line retaining chain, bar, gate or device.

(20) All stairways, ramps, accesses and egresses shall be lighted sufficiently to allow for safe entry and exit.

(21) Fencing of all rides is mandatory and will be kept at a normal distance of 36 inches from the ride and must meet the manufacturers recommendations or Office approval.


120-3-27-.24 Walkways and Ramps.

(1) Walkways and ramps shall be erected with a slope not greater than one in ten except that when approved nonslip surfaces are provided, the grade may be increased to a maximum of one in eight.

(2) Elevators, Dumbwaiters, Escalators and Moving Walks, ANSI/ASME Code 17.1 latest adopted version is hereby adopted as a rule and all future amendments shall be accepted as adopted.

This document may be purchased from the American National Standards Institute, 25 W 43rd Street, 4th Floor, New York, NY 10036.

(3) Each owner of an amusement ride which uses an elevator, escalator or moving walk as part of ride shall comply with (2) above.
120-3-27-.25 Buildings and Structures as Part of an Amusement Ride.

(1) The subchapter shall apply to the construction of buildings and structures that are a functional part of an amusement ride. To be a functional part of an amusement ride, the building or structure shall be a contributing factor to the amusement, pleasure, thrill or excitement of the ride.

(2) The maximum height of any amusement device in which passengers are transported shall not exceed forty feet in frame construction, one hundred feet in unprotected noncombustible and heavy timber mill construction, and shall not be limited in fireproof construction.

120-3-27-.26 Fire Prevention.

(1) All enclosed amusement park buildings over one story in height shall be constructed or protected to furnish not less than one hour fire resistance rating; except where roof framing and decking are specifically permitted to be of non-combustible or mill type construction. No styrofoam will be used inside buildings such as spook houses, etc.

(2) All structures located within 20 feet of lot lines or within 20 feet of other structures on the same lot, shall be of protected noncombustible or protected masonry enclosed construction or better.

(3) In addition to the fire extinguisher and firefighting equipment required by the use and occupancy of each building and structure under the provisions of the Rule every amusement ride building or structure, when required by the Commissioner, shall be provided with a system of fire hydrants and fire lines.

(4) Fabrics constituting part of an amusement ride shall be flame resistant to meet the following field test: the application of a flame from a 3/4 inch paraffin candle for a period of one minute which does not cause the fabric to flash, nor support combustion, nor continue to flame for more than two seconds or glow for more than 30 seconds after the removal of the test flame.

(5) Approved fire extinguishers in accordance with NFPA 10, 2002 shall be provided at the following locations to secure reasonable and adequate protection from fire hazards:
   (a) At or near all operating gasoline or diesel engines;
   (b) At or near all Operators' Stands excluding water flumes;
   (c) At each food handling booth where cooking is done.

(6) Flammable waste such as oily rags and other flammable materials shall be placed in covered metal containers which shall be kept in easily accessible locations. Such containers shall not be kept at or near exit.

(7) Gasoline and other flammable liquids and flammable gases when stored shall be kept in reasonably cool and ventilated places. Such liquids shall be in approved containers. Smoking and the carrying of lighted cigars, cigarettes, or pipes is prohibited within 50
feet or in any area where such liquids or gases are stored, or are transferred from one container to another.

(8) The fire limits shall comprise the areas containing congested business, commercial manufacturing and industrial uses or in which such uses are developed.

(9) All other areas not included in the fire limits shall be designated as outside fire limits.

(10) Fire wall separation: The building or structure or addition thereto shall be so located and constructed that every exterior wall with an adjacent fire separation of less than three feet shall be a noncombustible fire wall or shall be protected by a noncombustible fire wall having a fire resistant rating of at least four hours. The roof covering shall have at least a Class "B" rating.

(11) Open space with fire rated walls separation: The building or structure or addition thereto shall be so located and constructed that every exterior wall with an adjacent fire separation of more than three feet but less than 30 feet, shall be a noncombustible fire resistance rated wall. The fire resistance rating of the wall and the fire resistance rating of opening protectives for all openings in the wall shall be as shown in the table below.

(12) The fire resistance rated wall shall be so constructed that it will remain structurally in place, against an exterior exposing fire, for the duration of time indicated by the required fire resistance rating. When the fire rated wall is adjacent to a flat roof, it shall be constructed with a parapet, and the roof covering shall be at least Class "B" roofing.

### Fire Resistance Rating of Exterior Walls

<table>
<thead>
<tr>
<th>Width of fire separation adjacent to exterior wall</th>
<th>Fire resistance rating of exterior wall</th>
<th>Fire resistance rating of exterior opening protectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 3 ft. but less than 6 ft.</td>
<td>3 hour</td>
<td>3 hour</td>
</tr>
<tr>
<td>6 ft. or more but less than 11 feet</td>
<td>2 hour</td>
<td>1 ½ hour</td>
</tr>
<tr>
<td>11 ft. or more but less than 30 ft.</td>
<td>1 hour</td>
<td>3/4 hour</td>
</tr>
</tbody>
</table>

(13) Storm enclosures: Storm enclosures may be erected of frame construction not more than 10 feet in height and not more than 3 feet wider than the entrance doors which they serve, provided they do not project more than 6 feet beyond the building line.

(14) Roof coverings: All roof coverings shall be constructed of Class "A", Class "B" or Class "C" roofings.
120-3-27-.27 Water Flumes, Structural Design.

(1) Structural Design. The slides structural design and materials shall be in accord with generally accepted good structural engineering practices and shall provide a durable structure which will safely sustain all weights and pressures (dead load, live load, liquid, hydrostatic and earth pressures) for the expected operating life of the structure. The flumes and pools shall be watertight and their surfaces shall be inert, nontoxic, smooth and easy to clean. The flumes shall be designed or ventilated, or both, to prevent a possible hazardous concentration of toxic disinfectant fumes.

(2) Dimensional Design: All curves, turns and tunnels within the path of a slide flume shall be designed so that body impact with the walls of the flume or ceiling of a tunnel does not present a hazard. The slide flume shall be banked to keep the slider's body safely inside the flume or curve under all foreseeable circumstances.

(3) All slopes within the path of the slide flume shall be designed so that the slider's speed does not exceed a level where a safe equilibrium of dynamic forces cannot be maintained on any curve or turn within that path, as specified by (2) above.

(4) In sections of the elevated flumes where, contrary to intended use, a slider may stop, there shall be safety walls or other provisions to keep the slider from falling out of the flume.

(5) The construction, the dimensions and the mechanical attachment of slide flume bed components shall be such that the surface of the slide flume is continuous and smooth for the entire length.

(6) Wall thickness of flumes should be designed so that the continuous and combined action of hydrostatic, dynamic and static loads and normal environmental deterioration do not cause structural failures which could result in injury.

(7) Flume exit sections shall be designed to assure safe entry speeds, angles and stopping distances.

(8) The distance between the centerline of a flume exit and a splash pool side wall shall be at least 5 feet. The distance between sides of adjacent flume terminuses shall be at least 6 feet center line to center line. The distance between a flume exit and the opposite side of the splash pool, excluding steps, shall be at least 20 feet.

(a) High-Speed Slides: Special provisions shall be made in flume exit design, pool depth and pool width, measured from flume exit, to safely accommodate slide specifically designed with greater slopes or other special features which allow an unusually rapid descent.

(b) Multiple-exit slides: Multiple-exit slides shall have parallel exits or be constructed so that their centerlines do not intersect for a distance of at least 20 feet from the exists of each flume. If slides with nonparallel exits discharge bathers at a high speed, the centerlines should not intersect for at least 30 feet.

(9) A flume exit system shall provide safe entry into the splash pool. Present practices for safe entry include a water backup, a deceleration distance and an altitude control. Other methods are acceptable as long as safe exit velocities and proper user attitudes are
assured under normal use.
(10) Splash pool depth at the end of a flume shall be at least 3 feet. This depth shall be
maintained in front of the flume for a distance of at least 20 feet, from which point the
splash pool floor may have a constant slope upward to the minimum water depth. These slopes
shall be no more than 1 foot in 7 feet. If special exit systems that assure safe exit
from the flume and safe entry to the splash pool are used, the 3-foot depth and minimum
maintenance distance for this depth can be waived.
(11) Decks along the exit side of the splash pool which have the function of providing an
exit route only for sliders, shall be a minimum of 5 feet in width. If the deck is utilized by
both sliders exiting the plunge pool and observers, the said deck shall be a minimum of
10 feet in width. All deck surfaces shall have a slip-resistant surface and shall be sloped
away from the plunge pool so as to prohibit surface water from entering the plunge pool.
The said slope shall not exceed 1 foot in 7 feet.
(a) Provisions shall be made to eliminate standing water at all deck areas adjacent to the
entrance at the top of the flume.
(b) Decks along the side opposite the pump reservoir shall be at least 4 feet wide and
shall have the same slip resistance and drainage requirements as top and splash pool
decks.
(c) The pump reservoir area shall be accessible, for cleaning and maintenance, by a 3-foot
minimum width walkway deck.
(12) A 4-foot minimum width walkway, walkway steps, or stairway shall be provided
between the plunge pool and the top of the flume. Walkways and steps shall be well
drained, non-slippery and separated from the flume by a physical barrier, set back far
enough from the operating flume so that users cannot contact it on the way down.
(13) All stairways used as part of a slide shall not retain standing water and should
conform to the requirements of local building codes.
(14) Visitor and Spectator Areas: The spaces used by visitors and spectators shall be
distinctly and absolutely separated from those spaces used by sliders. Visitors and
spectators in street clothes may be allowed within the perimeter enclosure if they are
confined to an area separated from the space the sliders use.
(15) Typical Posted User Safety Warnings for Slide Operational Use:
(a) No running, standing, kneeling, rotating, tumbling, or stopping in flumes or tunnels.
(b) No diving from flume at any time.
(c) Never use this slide when under the influence of alcohol or drugs.
(d) Only one person at a time. Obey instructions of top pool supervisor and lifeguard at
all times.
(e) Never form chains unless authorized by slide manager or by posted instructions.
(f) Keep hands inside the flume.
(g) Leave the landing pool promptly after exiting from slide.
(h) Keep all glasses, bottles and food away from pools.

Design" was filed on March 19, 1986; effective April 8, 1986.

120-3-27-.28 Circulation Systems.
(1) All water impounding flumes or rides using lakes with adequate fresh water inlets and outlets to prevent contamination shall not be required to comply with the following requirements on circulation.
(2) The filtration system shall be of adequate size to maintain water quality/clarity at a level not to exceed .5 J.T.U.'s (Jackson Turbidity Units) at all times.
(3) All equipment shall have installation and operation instructions posted in the immediate area of the equipment.
(4) Appropriate gauges shall be provided on both the influent and effluent sides of the filtration pumps/filters in order to assess the efficiency of said filter.
(5) Materials used in the circulation system shall comply with the requirements of the latest joint National Swimming Pool Institute — National Sanitation Foundation standards.


**120-3-27-.29 Filters.**

(1) All water impounding flumes or rides using lakes with adequate fresh water inlets and outlets to prevent contamination shall not be required to comply with the following requirements on filtration.
(2) Filters shall be designed to maintain pool water under anticipated operating conditions in accordance with guidelines.
(3) A means for releasing air which enters the filter tank shall be provided. This may be automatic or manual. Where an upflow design is used, air must be expelled through the filter tank. Any filters incorporating an automatic internal air release as their principal means of air release must have lids which provide a slow and safe release of pressure. Any separation tank used in conjunction with a filter tank shall have a manual means of air release or a lid which provides a slow and safe release of pressures.
(4) A statement warning personnel not to start the filter pump without first opening the air release shall be clearly visible on the separation tank in the area of the air release.
(5) Piping furnished with the filter shall be capable of withstanding three times the working pressure. The suction piping shall not collapse when flow on the suction side of the pump is completely shut off.

Authority O.C.G.A. Sec. 25-15-59. **Administrative History.** Original Rule entitled "Filters" was filed on March 19, 1986; effective April 8, 1986.

**120-3-27-.30 Pumps.**

(1) Pumps and motors shall be provided to circulate the water in the splash pool and slide. Performance of all filter pumps shall meet the conditions of flow required for filtering and cleaning (if applicable) the filters against the total head developed by the
complete system. Flume pumps and motors shall be of adequate size, as specified by the flume manufacturer, and shall meet all National Swimming Pool Institute standards for swimming pool pumps.

(2) The pump suction header shall have a gauge which indicates vacuum. The gauge shall be installed as close to the pump inlet as possible.

(3) All pressure filter systems shall have suitable removable strainers or screens before all circulation pumps to remove solids, debris, hair, lint, and other materials.

(4) Pump units shall be accessible for inspection and service.

(5) All motors shall be, as a minimum, an open drip-proof enclosure (as defined by the latest National Electrical Manufacturers Association standards).

(6) All motors shall have thermal overload protection.

(7) The motor frame shall be properly grounded.

(8) Pumps used on slides shall comply with the latest joint National Swimming Pool Institute—National Sanitation Foundation performance standards in effect at the time the pump is installed.


120-3-27-.31 Inlets and Outlets.

(1) Pool inlets and outlets shall produce a uniform circulation of water to maintain a uniform disinfectant residual.

(2) The number and location of pool inlets shall be adequate and appropriate to insure that uniform water quality, as described herein, is maintained at all times.

(3) At least one outlet shall be provided at the lowest point of the floor to completely drain the entire floor. When the main outlets for pool pump suction are installed in the pool floor near one end, the spacing shall not be greater than 20 feet (6.1 m) on centers, and an outlet shall be provided not more than 15 feet (4.57 m) from each side wall. The total velocity through grate openings shall not exceed 2 feet per second (61 cm/second). Grate openings shall be designed to prevent fingers and toes, etc., from being trapped in the openings.

(4) Outlets on pump suction, except those for skimmers shall be covered with suitable protective grates that cannot be removed except with tools.

(5) An over-the-rim spout, if used shall not create a hazard. Its open end shall have no sharp edges and shall not protrude more than 2 inches (5.1 cm) beyond the edge of the pool.

(6) Inlets from the circulation system shall not project enough to cause harm to the splash pool user.


120-3-27-.32 Piping.
The size of the slide circulation piping shall permit the rated flows for filtering and cleaning without exceeding the total head developed by the pump at the rated flow. The water velocity shall not exceed 10 feet per second (3.05 m/second) for discharge piping, except for copper pipe where the velocity shall not exceed 8 feet per second (2.4 m/second) and asbestos cement pipe, where the velocity shall not exceed 6 feet per second (1.83 m/second). Suction velocity for all piping shall not exceed 6 feet per second (1.88 m/second).


120-3-27-.33 Waste Water Disposal.

Overflow water shall be returned to the filter system or discharged to a waste system approved by local authorities. Where perimeter overflow water discharges into a sanitary sewer, a suitable air gap at least 1 ½ times the discharge diameter shall be provided to create a gravity drip which has no direct mechanical connection into the sewer. When an air gap is impractical, a relief manhole with a grated cover shall be constructed in the perimeter overflow main waste line, the clear area of which shall be twice the area of the main waste piping. It shall be at a level so that the waste flow in the line will rise in the manhole and overflow at ground level not less than 2 feet (61 cm) below the level of the perimeter overflow lip.


120-3-27-.34 Water Quality.

Water impounded by the ride owner and used as an integral part of a water amusement ride, whether it be a part of a water contact ride or a water noncontact ride, which could expose the public to a safety or health hazard shall be maintained in a safe and sanitary condition in accordance with this section.

The owner of any water amusement ride as described in (1) above shall provide evidence of the sanitary condition of such water when requested by the Safety Engineering Section.

In order to maintain the safe and sanitary condition of water in a water amusement ride the owner of a water amusement ride shall disinfect with chlorine or other approved disinfecting agent.

Impounded water, when in use, shall be:

(a) Sufficiently clear to permit the bottom of the water reservoir at its deepest point to be visible from an outside edge of the reservoir;
(b) Aesthetically pleasing; and
(c) Free of floating or suspended matter, except those items used specifically as part of the amusement.
120-3-27-.35 Disinfectant and Chemical Feeders.

(1) Disinfectants used in flume and pool water shall provide a disinfecting residual in the pool water. Chlorine or chlorine compounds are most frequently used for this purpose, but other bactericidal agents or apparatuses are acceptable if registered by the U. S. Environmental Protection Agency.

(2) Adequate and appropriate equipment for introducing a disinfectant into the recirculating system shall be provided. This equipment shall be of sufficient capacity to maintain appropriate disinfectant residual levels at all times. The DPD (diethyl-p-phenylene-diamine) or other suitable free chlorine test method is suggested as a means of testing for the free chlorine residual.

(3) Feeding equipment shall be capable of permanently and precisely feeding the required quantity of disinfecting agent to the pool water. The disinfecting material used shall be subject to field-testing procedures.

(4) Chemical Operational Parameters; National Swimming Pool Institute Standards set forth the suggested operational parameters for proper chemical treatment and maintenance of both flume and pool waters. Because of high aeration rates and potentially high slider loads in the lower pool, tests for water quality and chemical balance shall be made every two hours the facility is operating. Proper water balance shall be obtained each day before the facility is opened to the public.

(5) Recommendations on the Use of Elemental Chlorine and Operational Procedures: Although chlorine solution (hypochlorite) is preferable from a safety standpoint, gaseous chlorine may be approved as the disinfectant.

(6) Hypochlorinators or other adjustable-output rate chemical-feeding equipment shall conform to the joint National Swimming Pool Institute-National Sanitation Foundation Standard #19, relating to "Adjustable Output Rate Chemical Feeding Equipment and Flow Thru Chemical Feeding Equipment for Swimming Pools."

(7) Equipment and Installation: Chlorination equipment shall be located so that an equipment failure or malfunction will have a minimum effect on an emergency evacuation of patrons.

(8) The chlorinator, cylinders of chlorine, hypochlorite and associated equipment shall be housed in a reasonable open building with a leak detection system set at or slightly above ground for the detection of chlorine gas. Cylinders shall be securely fastened to a wall or post. Except for chemicals used to check chlorine leaks, no other chemicals shall be stored in the chlorine enclosure.

(9) Chlorine cylinders must be handled with care. Valve protection caps and valve outlet caps must be in place at all times, except when the cylinder is connected for use. Cylinders must not be dropped and shall be protected from falling objects. Cylinders shall be used on a first-in, first-out basis. Fresh washers shall be used each time a cylinder is connected.

(10) As soon as a container is empty, the valve shall be closed and the lines disconnected. The outlet shall be promptly capped and the valve protection hood attached. The open
end of the disconnected line shall be plugged or capped promptly to keep atmospheric moisture out of the system.

(11) Although chlorine suppliers make every effort to furnish chlorine in properly conditioned cylinders, chlorine gas leaks may still occur. Operating personnel shall be informed about leak-control procedures.

(12) Enclosures shall be located at ground or above ground level. If the enclosure must be installed below grade, it shall have airtight ducts from the bottom of the enclosure to atmosphere in an unrestricted area, a motor-driven exhaust fan capable of producing at least one air change per minute and automatic louvers of good design near the top of the enclosure for admitting fresh air. The enclosure shall be inaccessible to casual slide users and, if possible, locked. All keys shall be kept on the premises so that they will be readily available when needed by servicing personnel.

(13) Containers may be stored indoors or outdoors. Full and empty cylinders shall be segregated and tagged.

(14) An automatic chlorine leak detector shall be installed, especially in below-grade installations.

(15) Respirators approved by the National Institute for Occupational Safety and Health shall be provided for protection against chlorine.

(16) At least one approved self-contained breathing apparatus shall be provided. Respiratory equipment shall be mounted outside the chlorine enclosure and filter cartridges replaced after each use.

(17) Elemental chlorine feeders shall be activated by a booster pump, with recirculated water. The booster pump shall be electrically or mechanically interlocked to the filter pump to prevent the feeding of chlorine when the recirculation pump is not running.

(18) Connections from the cylinders to the system depend on the type of chlorinator used and shall comply with the chlorinator manufacturer's recommendation.

(19) Electrical switches for the control of artificial lighting and ventilation shall be on the outside of the enclosure, adjacent to the door.

(20) Responsibility for Chlorination and Water Treatment: A specific person on each shift shall be responsible for disinfection and water treatment operations and shall be thoroughly trained in the performance of routine operations, including emergency procedures and leak-control problems. If possible, these people should complete training courses on swimming pool operations, given through local departments of health. A typical reference text available for such training is Swimming Pool Operators Handbook, published by the National Swimming Pool Foundation. This text is available through the National Swimming Pool Institute, 200 K Street, N. W., Washington, D.C. 20006. Another reference is Swimming Pools—Safety and Disease Control Through Proper Design and Operation. This manual is available through the Environmental Health Services Division, Center for Environmental Health, Centers for Disease Control, Atlanta, Georgia 30333. As an alternative, they should be trained by a professional operator. The facility shall not be in operations without such a person in attendance. No one else shall be responsible for chlorination or water treatment operations.

(21) A safety chart shall be posted in or near the chlorine enclosure, and a second chart shall be in the pool office near the telephone. Such charts are available from many suppliers and from the Chlorine Institute, 342 Madison Avenue, New York, New York 10017. The telephone number of the chlorine supplier shall be shown on these charts.
(22) Responsibility for Circulation and Filter System Operation. A specific person on each shift shall be made responsible for circulation and filter system operation, checks, maintenance, backwash and cleaning. This person shall be trained by a professional operator or an expert in swimming pool operations and shall carry out all scheduled cleanings and maintenance on the circulation and filter systems.


120-3-27-.36 Electrical Safety and Lighting.

(1) The latest National Electrical Code, as published by the National Fire Protection Association, or a local code, whichever is more restrictive, shall be used for the wiring and grounding of all electrical equipment associated with a slide and for the grounding of all metallic appurtenances.
(2) Whenever slides are operated after dark, artificial lighting shall be provided in upper and lower pool and deck areas, walkways, stairways, and flumes, as recommended by local codes or The Illuminating Engineering Society Lighting Handbook.


120-3-27.-37 Operation, Water Slides.

(1) Personnel responsible for the operation of disinfecting equipment shall be properly trained in equipment operation, field test procedures, and emergency procedures.
(2) The manufacturer or the general contractor of the slide shall provide the operator with a detailed written operational manual, or guide, for all phases of operations and normal maintenance of each component of the system. The guide shall be kept in a secure area and made available to each employee as needed. This guide shall include, as a minimum, the following information:
(a) Customer safety rules to be posted at the entrance to flumes;
(b) Required training or certification levels of upper and lower pool supervisors;
(c) The number and type of operating personnel;
(d) Specific work statements for each employee;
(e) Recommendations on the safe handling of crowds during emergencies;
(f) Slide maintenance and cleanup;
(g) Disinfectant operation;
(h) Chlorine cylinder changing procedure (if applicable);
(i) Pump operating instructions;
(j) Backwash procedure;
(k) Operating instructions for vacuum filters (if applicable);
(l) Filter pit draining and cleaning procedure;
(m) Water test instructions — frequency of testing, method of test, interpretation of results;
(n) Filter checks;
o) Record-keeping for health department;
(p) First-aid reports;
(q) Emergency phone numbers;
r) Equipment and operational trouble-shooting instructions;
s) Safe repair practices for flume and decks.


120-3-27-.38 Competence of Operators.

(1) Having properly trained and conscientious employees on site is the most important safety factor in the operation of slides.
(2) At least one person who has completed the Standard First Aid and Personal Safety course, as offered by the American National Red Cross, or the equivalent shall be on duty at all times during operating hours. This person shall also be competent in carrying out any emergency procedures peculiar to the slide he or she is operating.
(3) Splash Pool Supervisor: The principal function of the lower pool supervisor is to serve as a lifeguard. The lower pool supervisor shall be qualified in life-saving techniques through Red Cross training or the equivalent. He or she shall also control crowds in the splash pool by keeping sliders moving into and out of the lower pool as quickly and in as orderly a manner as possible; and shall control any horseplay, running, or unsafe behavior in the lower flumes, the splash pool and on the pool decks.
(4) Upper Pool Supervisor: The principal functions of the pool supervisor are to control crowds and sliders starting from the upper pool and flume, control the timing of each person on the slide and supervise all visible portions of the flumes.


120-3-27-.39 Emergency Procedures.

(1) The need for emergency planning in areas of public recreation has been demonstrated by past experience. Being prepared for problems is the best method of minimizing their consequences. Therefore, a written plan for emergencies shall be carefully devised and kept up-to-date. All employees shall be trained and drilled periodically in the execution of the plan. During operational hours, a person qualified through American National Red Cross training in both first-aid and life-saving techniques shall be on duty at all times.
(2) The emergency plan shall encompass crowd control and safe evacuation, drownings, electrical shock, heat prostration, fractures, poisonings, cuts and burns, neck and back or spinal injuries and exposure to chlorine gas. Each of these situations is addressed in the latest American National Red Cross handbook on first aid, a copy of which shall be on hand at the same location as the emergency plan, the first-aid kit, and the emergency telephone numbers.
(3) Each park shall have available the following first-aid supplies:
(a) First-Aid Kit. A standard 24-unit kit stocked and readily accessible for use;
(b) A stretcher and blankets;
(c) A standard plywood backboard or other acceptable splint, made to the specification of the American National Red Cross, for persons with back and neck injuries;
(d) An area or room shall be set aside for the emergency care of causalities.
(4) Every park shall have posted by the phone a list of current emergency numbers, such as the nearest available facilities, ambulance service, hospital, rescue squad, police department, fire department, and the nearest local facility with capabilities to handle a major chlorine gas leak. One of the most effective methods of control of emergencies is to plan for them in the original design of the facility. Health and safety officials should review and comment on the original plans and layouts before a building permit is issued.
(5) Two types of emergency situations for which evacuation procedures shall be developed are:
(a) Major release of chlorine gas;
(b) Power outage during night time operation.


120-3-27-.40 Power Outage.

Each facility shall have an emergency plan for use in the event of a night time power outage. Battery-operated emergency lighting packs are available as standard building electrical items. In addition, portable lights and bullhorns shall be available to personnel at all times, and an evacuation plan shall be devised. Personnel shall be drilled regularly in execution of the plan.


120-3-27-.41 Kart Rules and Regulations.

(1) Mandatory rules and regulations for every owner, manager, and operator who provides for the operation and use of all types of mechanically operated karts which carry or convey passengers along, around, or over a fixed or restricted route or course or within a defined area for the purpose of giving its passengers amusement, pleasure, thrills or excitement shall comply with the Georgia Amusement Ride Safety Act, the Georgia Laws and Rules for Regulating and Licensing Amusement Rides Chapter 15 of Title 25 and this Section.
(a) Definition of terms used in this section:
1. The term "kart" means a powered vehicle used for amusement along, around or over a fixed restricted route or course or within a defined area including vehicles commonly called go karts and similar vehicles.
2. The term "kart ride" includes all karts, kart track, refueling areas, spectator areas, and
all other areas used in any manner for the operation of karts.
(b) Where a kart is defective and not in compliance with this provision, such units shall be taken out of service and clearly marked with a red tag reading "Out of Service."
(c) The Chief Safety Inspector or his designee, upon presenting credentials to the owner/operator, is authorized without prior notice to inspect and investigate during regular working hours and at other reasonable times, and within reasonable limits and manner, any kart, kart track, or other area of the kart rides.
1. Inspection includes, but is not limited to, a review of necessary documents, observance and/or inspection of the karts, kart track or any portion of the kart ride.
2. Inspection of the ride is to include: track design, track operation, kart design, fuel containers, mechanical condition and safe operation of the ride.
(d) The Office shall order in writing, a temporary cessation of operation of the kart ride, if it has been determined after inspection to be hazardous or unsafe or the failure to comply with any of the other provisions of the Chapter or the regulations promulgated thereunder including, but not limited to, the requirements set forth in Section .04 of this Chapter. Operation shall not be resumed until such conditions are corrected to the satisfaction of the Office.
(2) Track Operations.
(a) All karts that are operated on a kart track shall have bumpers, wheels and body parts that are compatible.
(b) No kart shall be operated during a lightning storm, a period of tornado alert or warning, fire, riot or other civil disturbance in the amusement park or in an area adjacent thereto. Passengers shall be unloaded and evacuated from the ride and the ride shut down until normal, safe operational conditions are established.
(c) All kart tracks shall be monitored during its operation either directly by attendants or indirectly by electronic visual and audio means acceptable to the Office.
(d) A kart that is losing oil or fuel shall immediately be removed from the kart track and be repaired prior to returning to operation on the kart track.
(e) Karts may only be operated by persons within the heights limits set by the manufacturer. If no height limit is set by the manufacturer, height limit shall be no less than 52 inches.
(f) Karts designed for single or dual riders shall use a shoulder harness and belt restraint system acceptable to the Office.
(g) All loose clothing and hair longer than shoulder length must be secured prior to operating any kart. Fully enclosed shoes must be worn by operators and passengers at all times during operation of a kart.
(h) A person who is smoking shall not be permitted to operate a kart.
(i) Track attendants shall not allow riders to leave their vehicles either in the pit or on the track unless assisted by a track or pit attendant.
(j) Where a kart track exposes a passenger or operator to high speed, or a high degree of excitement, the owner shall post a conspicuous warning sign at the entrance to the kart track advising the public of risk to passengers.
(k) The sign required by (j) above shall be at least two feet by two feet in sharply contrasting colors.
(l) The sign required by (j) shall read as follows or express an equivalent warning: "The following people should not ride this ride."
1. Those with heart conditions
2. Pregnant women
3. Those with back or neck ailments"

(m) Every kart track shall have a sign posted at the ticket window or track entrance and in the pit area that conveys at least the following rules and regulations.
1. Height limit as specified by manufacturer, or no less than 52 inches.
2. Keep both hands on the wheel and both feet in the kart at all times. Do not get out of kart unless track attendant is present.
3. All loose clothing and hair longer than shoulder length must be secured. Fully enclosed shoes must be worn by operators and passengers at all times during operation of kart.
4. No smoking in karts or pit area.
5. Persons under the influence of intoxicants will not be allowed to operate karts.

(n) The use of private karts or vehicles will be prohibited on kart or other vehicle tracks while open to the general public.

(3) Kart Designs:
(a) The speed of every kart shall be set at a limit of not more than 20 mph, and not to exceed the maximum speed for which the track is designed and acceptable to the Department.
(b) Where the design of a kart enables the readjustment of its speed, the means of adjusting the speed shall not be accessible to the operator of the kart.
(c) The seat, back rest, seat belts and leg area of every kart shall be so designed as to retain the driver inside the kart in the event of a collision or overturn.
(d) No more than one person shall occupy a kart at one time unless the kart is designed and equipped with a seat belt system that is intended for two persons.
(e) All karts shall be provided with sufficient guards to prevent anyone from coming in contact with drive chains, belts, hot muffler, engine parts or any rotating parts.
(f) The steering wheel and its hub and all exposed components on a kart shall be padded to minimize the risk of injury to an occupant in the event of a collision or overturns.
(g) All karts shall have headrests of roll bars which must be of sufficient height and strength so as to provide the occupant with protection in the event a kart should roll over.
(h) A kart shall be provided with impact absorbing bumpers, or energy absorption body parts.
(i) Kart wheels shall be so enclosed or guarded so that the wheels of another kart cannot interlock with or ride over the wheels of another kart.
(j) The kart fuel tank shall be so designed and mounted that it cannot be damaged or spill any fuel in the event of collision or the kart overturning.
(k) All karts shall have sufficient muffler systems installed so as to prevent any undue noise levels which will interfere with the track operations, adjacent businesses, residential areas or damage the hearing of employees or patrons.
(l) Daily inspections shall be made on all karts prior to operation. It shall include but not limited to: tires, padding, steering, frame welds, spindles, axles, safety belts, roll bars, gasoline tank condition, brake and gas pedal operation, etc., as recommended by the kart manufacturer and acceptable to the Office.
2. Weekly as recommended by manufacturer and acceptable to the Office.
3. Monthly as recommended by manufacturer and acceptable to the Office.
4. Annually as recommended by manufacturer and acceptable to the Office.
(4) Track Design:
(a) The design of the kart track shall be consistent with the kart manufacturer’s recommendations and acceptable to the Office.
(b) A kart track shall:
1. Have a hard and smooth surface as recommended by kart manufacturer.
2. Provide road grip sufficient to enable a kart to be driven safely at maximum speed and be free of ruts, holes or bumps, water, oil, etc.
3. Track Bank—may be banked on turns only, minimum of 2 degrees and maximum 4 degrees.
4. Straight-away length must be flat, except two (2) degrees allowed for drainage.
5. Track width must be a minimum of 16 feet wide and maximum 25 feet wide. On an oval track the turns should be a minimum of 5 feet wider than straight-away. The minimum radius of the turns is 15 feet.
6. Signs that indicate one direction of travel of karts shall be posted at various locations around the kart track perimeter. Signs that indicate no “U” turn must be posted at various locations.
(c) White or yellow lines at least four inches in width shall be used to mark all inside and outside edges of a kart track except where barriers are provided along the inside and outside edges of the kart track.
(d) 1. A kart track shall be equipped with ABC dry chemical fire extinguishers of a minimum of 5 pounds capacity.
2. A fire extinguisher shall be located within seventy feet of all areas of the track and one fire extinguisher shall be kept in the pit and in the refueling area.
3. The location of each fire extinguisher shall be prominently marked and the fire extinguisher easily accessible.
(e) Refueling of karts shall be at a designated location remote from any area that is accessible to the public and must comply with NEC 70-510, 511, 514 and other applicable codes.
(f) 1. The shoulder of every kart track shall be level with the kart track or guarded to prevent the kart from leaving the track.
2. The spectator area shall have a smooth and firm surface up to at least 15 feet from the edge of the kart track.
3. Each barrier on a kart track shall:
   (i) Be so constructed that a kart colliding with a barrier at maximum speed will:
      (I) Safely come to a full stop, or
      (II) Be guided safely back to the proper part of the kart track;
   (ii) Be so designed as to prevent a kart from overturning or running over or under the barrier after its contact with the barrier, and;
   (iii) Be constructed of materials that will not readily ignite.
(g) 1. Every kart track shall be surrounded by a fence that is at least 48 inches in height and be set back from the track at least 36 inches from the inside face of the barrier.
2. The requirements above may be met by natural barriers that provide the same degree of protection as the fence.
3. Gates will be located for easy supervision by attendants while the track is open, and locked when track is closed.
(5) Pit or pit areas:
(a) Must be fenced or have a barrier.
(b) Separate entrance and exit lanes required.
(6) Spectator Area must be separated from track and pit areas by fence or barriers that are built sufficient to withstand full impact from kart or other type of vehicle traveling at full speed.
(7) Electric — Lighting:
(a) All electric will comply with NFPA 70 and all revisions.
(b) Lighting for night operation will comply with all applicable codes acceptable to the Office.
(8) In addition, track design will incorporate all industry accepted standards of safety. Proposals for construction in the State of Georgia will be submitted to the Office of Insurance and Safety Fire Commissioner Safety Engineering Section and other appropriate agencies before construction begins. All building support items, etc., must be approved by appropriate agencies. These items listed above are minimum requirements.


120-3-27-.42 Imposition of Civil Penalties.

(1) Issuance of Citation or Notice of Administrative Proceeding:
(a) If, upon inspection by an inspector or deputy inspector,
1. An amusement ride is deemed to be in an unsafe condition,
2. The owner, operator, user, contractor, or installer has not complied with the Amusement Ride Safety Law or these rules, or
3. When a written warning has been issued and the violations continues, then the deputy inspector shall issue the violator a Citation stating the date, time and place of the violation, the specific violation, the recommended penalty, and shall offer the respondent the opportunity for a hearing as set forth in this section.
(b) If, upon receiving information from any source, the Chief Inspector determines that:
1. An amusement ride may be in an unsafe condition,
2. The owner, operator, user, contractor, or installer has not complied with the Amusement Ride Laws or these rules, or
3. When a warning has been issued, the violation is a continuing violation, the Chief Inspector or the Director, Safety Engineering, on behalf of the Office, may issue Notice of Administrative Proceeding stating the date, time and place of the violation, the specific violation, the recommended penalty, and shall offer the respondent the opportunity for a hearing as set forth in this section.
(c) The Director, Safety Engineering, upon review of a citation issued under subsection (a) above, may, in his sole discretion, dismiss the Citation and substitute therefore a Notice of Administrative Proceeding pursuant to subsection (b) above on the same, similar or different violations, as required by the evidence.
(d) The Commissioner of Labor, upon review of a Citation or Notice of Administrative Proceeding, in his sole discretion, may refer the matter to the appropriate prosecuting
official for criminal or injunctive relief as permitted under law. In such event, the
Commissioner may, in his sole discretion, elect to dismiss, suspend, or continue with the
civil penalty proceeding.
(2) Hearing Procedure:
(a) If a request for a hearing is not received from the respondent within the allotted time,
the Director, Safety Engineering, on behalf of the Commissioner, may without further
process impose a civil penalty not greater than the total of civil penalties set forth on the
Citation or in the Notice of Administrative Proceeding. An administrative order under the
authority of the Commissioner may be issued to collect the civil penalty assessed. If the
civil penalty is not paid; the Commissioner may authorize the Director to file appropriate
legal action in the name of the Commissioner through the Attorney General to collect the
civil penalty.
(b) Upon receipt of a request for a hearing pursuant to any Citation or Notice of
Administrative Proceeding, the Director, Safety Engineering, shall determine, in his sole
discretion, whether the hearing shall be held before the Commissioner of Insurance and Safety
Fire, or referred to the Office of State Administrative Hearings. If the hearing is to be before the
Commissioner, the Director shall set a date and time for the hearing and shall cause the case file
to be referred to the Attorney General for legal representation
of the Office. If the Director determines that a hearing before the Commissioner is not
warranted, the matter shall be referred to the Office of State Administrative Hearings pursuant to
O.C.G.A. 50-13-41(a)(1). The case file for an OSAH proceeding may be referred to staff counsel
within the Department or to the Attorney General for representation of the Department. The
Office of State Administrative Hearings will set the date, time and place of hearing as prescribed
by OSAH Rules.
(c) All hearings, whether before the Commissioner or before the Office of State
Administrative Hearings, shall be subject to the powers and procedures set forth in the
Administrative Procedure Act, including but not limited to O.C.G.A. 50-13-13 and 50-
13-15.
(d) The decision of an administrative law judge made after a hearing before the Office of
State Administrative Hearings shall be the initial agency decision as set forth in O.C.G.A.
50-13-41(d) and shall be subject to review by the Commissioner of Insurance and Safety Fire, as
set forth in O.C.G.A. 50-13-41(e). A hearing before the Commissioner shall be the final agency
decision in the matter and shall be subject to judicial review as set forth in O.C.G.A. 50-13-19.
(3) Guidelines for imposition of civil penalties:
(a) Any person, firm partnership, corporation or other business entity, which violates this
part, shall be subject to the imposition of civil penalties. Each day on which a violation
occurs shall constitute a separate offense. Repeat offenders, including those who refuse to
adhere to orders of inspectors, exceed the limitations of operating permits, or refuse to
adhere to the requirements of these rules and regulations, may be referred appropriate
prosecuting official for criminal (misdemeanor) or injunctive relief as permitted under
law. Serious violations, including those causing serious bodily injury or death, or which
exhibit gross negligence or serious disregard for public safety, may also be referred
appropriate prosecuting official for criminal (misdemeanor) or injunctive relief as
permitted under law.
(b) Notwithstanding the recommended minimum penalties set forth below, a serious
violation, including those causing serious bodily injury or death, or which exhibit gross
negligence or serious disregard for public safety, may receive the maximum penalty of $5,000.00 for each violation including a first offense. The imposition of a penalty for a violation of this part shall not excuse the violation or permit it to continue.

(c) The deputy inspector issuing a Citation shall, at the time of issuance, specify a recommended civil penalty amount for each specific violation in accordance with these Rules and Regulations. The Director, Safety Engineering, is charged with the responsibility to ensure that recommended penalties for violations are graduated with the more serious violation receiving the heavier penalty and with assuring uniformity of recommended penalties such that offenders in similar circumstances with similar violations receive similar penalty recommendations. In this regard, the Director may dismiss a Citation and issue a Notice of Administrative Proceeding solely for the purpose of making an appropriate penalty recommendation.

(d) The recommended civil penalty set forth in the Citation or Notice of Administrative Proceeding shall be given great deference by the Hearing Officer. The minimum recommended penalties set forth below are normally for first offenses with only one violation being cited. The Hearing Officer shall, after hearing the case, consider factors in mitigation of the violations as well as those in aggravation. The Hearing Officer shall impose a penalty less than the recommended minimum penalty only upon finding unusually significant mitigating factors, and shall set forth those factors in the order. The Hearing Officer may impose a penalty substantially greater than the department’s recommended penalty upon finding significant aggravating factors associated with the violation, and shall set forth those factors in the order. The Hearing officer shall consider the provisions of these Rules and Regulations guiding the assessment of penalties. In particular, the Hearing Officer, shall, in cases involving continued operation of equipment without valid operating certificates; continued operation of equipment after failing to notify the department of an accident involving structural damage, bodily injury, or death; or continued operation after an unsafe condition is detected or after the equipment is taken out of service by an inspector or deputy inspector, consider the imposition of separate penalties for each day of violation. The Hearing Officer shall not assess a penalty exceeding $5,000.00 for each violation or each day of a continuing violation. (e) The Hearing Officer may, in addition to a civil penalty, recommend in the order that the Commissioner suspend for a period of time or indefinitely, operating certificates, permits to install, or certificates for contractors.

(4) Minimum recommended penalties:
(a) Specific violations:
1. Operating equipment without a certificate of inspection or permit.
First offense ......................$250.00
Second offense ....................$500.00
2. Operating equipment in an unsafe condition. (Authority: O.C.G.A. Sec. 25-15-66)
First offense ......................$500.00
Second offense .....................$1,000.00
3. Failure to permit free access for the purpose of inspecting or investigating equipment.
(Authority: O.C.G.A. Sec. 25-15-67)
First offense ......................$500.00
Second offense .....................$1,000.00
4. Failure to notify the Chief Inspector of any accidents involving serious personal injury. (Authority: O.C.G.A. Sec. 25-15-61)
   First offense ......................$500.00
   Second offense ...................$1000.00
5. Failing to notify the Chief Inspector of an accident which involves death. (Authority: O.C.G.A. Sec. 25-15-61)
   First offense ......................$2500.00
   Second offense ...................$4500.00
6. Placing ride back in service which has been “Red-Tagged” or placed out of service by a deputy inspector, without first having the unit inspected. (Authority: O.C.G.A. Sec. 25-15-66(a))
   First offense ......................$1000.00
   Second offense ...................$2500.00
7. Placing ride back in service which has been involved in an accident prior to first having the unit inspected or otherwise cleared.
   First offense ......................$1000.00
   Second offense ...................$2500.00
   (Authority: O.C.G.A. Sec. 25-15-61)

(b) General violations:
1. Violating adopted Code, Standards, Rules, Regulations or Order. (Authority: O.C.G.A. Sec. 25-15-66(c)(2))
   First offense ......................$250.00
   Second offense ...................$500.00
2. Failure to file a required report. Each report constitutes a separate violation. (Authority: O.C.G.A. Secs. 34-12-18(c)(2) and 25-15-66(c)(2))
   First offense ......................$250.00
   Second offense ...................$500.00
3. Any third repeated offense may subject the violator to the maximum civil penalty permitted under the Act ($5,000.00). (Authority: O.C.G.A. Sec. 25-15-61)


120-3-27-.43 Special Situations.

Exemptions from Standards and Regulations approved by the Office. The owner/operator of the following equipment shall be exempt from applying for a permit or inspection. The owner/operator shall meet all other requirements of the Safety Act and these Rules.
(a) Mechanical bulls, climbing walls, human powered equipment or attractions, including but not limited to space balls, orbitrons, air supported structures, paddle boats, water cycles, bicycles and all rental boats.
(b) Playground equipment located at businesses, including but not limited to soft play
areas, single or multi-passenger rides which are passenger operated or controlled, and
may be electrically, mechanically, or manually powered, which do not normally require
the supervision or services of an operator or attendant.
(c) Single waterslides and similar non-mechanical attractions at municipal, county, state
or community operated swimming pools.


120-3-27-.44 Bungee Jumping. Amended.

This rule specifies and gives guidance on the site, design, testing of equipment,
management of the operation, operating procedures, emergency provisions, and
procedures for Bungee Jumping. Bungee Jumping will be restricted to permanent
structures, constructed solely for the purpose of Bungee Jumping. BUNGEE JUMPING
FROM HOT AIR BALLOONS, BLIMPS, CRANES, OR OTHER MOBILE
FACILITIES ARE PROHIBITED. This shall include stationary towers that are
utilizing construction baskets and construction hoisting equipment. This rule is applicable
to all operators of Bungee Jumping for public use.

adoption, to remain in effect for a period of 120 days or until the adoption of a permanent Rule covering the
same subject matter superseding this ER, as specified by the Agency. Amended: Permanent Rule adopted. F.

120-3-27-.45 Definitions. Amended.

The definitions in the Official Code of Georgia Annotated Sections 25-15-51 and
120-3-27-.45, of the Georgia Rules will apply and in addition the following shall apply:
(a) **AIR BAG** - A device which cradles the body and which uses an air release breather
system to dissipate the energy due to a fall, thereby allowing the person to land without
an abrupt stop or bounce.
(b) **BINDING OF CORD** - Material used to hold the bungee cord threads in place.
(c) **BUNGEE CATAPULTING** - The jumper is held on the ground while the bungee
cord is stretched. When the jumper is released, he/she is propelled upwards. BUNGEE
CATAPULTING IS PROHIBITED.
(d) **BUNGEE CORD** - The elastic rope to which the jumper is attached. It lengthens and
shortens and thus produces the bouncing action.
(e) **BUNGEE JUMPING** - When a person falls from a height and the descent is limited
by attachment to the bungee cord.
(f) **CORD** - See Bungee Cord.
(g) **DEFINED AREA** - The area designated for the bungee jump by the owner or
operator and approved by the Department.
(h) **DYNAMIC LOADING** - The load placed on the rigging and attachments by the
initial free fall of the jumper and the bouncing movements of the jumper.
(i) **EQUIPMENT** - Power or manually operated devices to raise, lower and hold loads.
(j) **FENCE** - A permanent or temporary structure designed and constructed to restrict people, animals and objects from entering the designated bungee jumping area.

(k) **INCIDENT** - An event that results in injury to a person, or an event that causes damage or loss of process (jumping interrupted or stopped).

(l) **JUMP AREA** - The maximum designed area in all directions for the movement of the jumper.

(m) **JUMP DIRECTION** - (Forward or Backward) The direction in which a jumper jumps upon leaving the platform from the jump point.

(n) **JUMP HARNESS** - An assembly to be worn by a jumper, which is attached to a bungee cord.

(o) **JUMP HEIGHT** - The distance from the jump platform to the bottom of the jump zone.

(p) **JUMP MASTER** - A person who has responsibility for the bungee jumping operation and who prepares the jumper for the actual jump.

(q) **JUMP OPERATOR** - A person who assists the jump master to prepare a jumper for jumping and operates the lowering system.

(r) **JUMP POINT** - The position from which the jumper leaves the platform.

(s) **JUMP ZONE** - The space bounded by the maximum designed movements of the jumper or any part of the jumper.

(t) **JUMPER** - The person who falls or jumps from a height attached to a bungee cord.

(u) **JUMPER WEIGHT** - The weight of the jumper only, determined by the jump master on a calibrated scale, traceable to a National Standard.

(v) **LANDING AREA** - The surface area of a net, pad, air bag or water directly under where the jumper lands.

(w) **LATERAL DIRECTION** - The area measured at 90 degrees to the designed jump direction.

(x) **LOWERING SYSTEM** - Any manual or mechanical equipment capable of lowering a jumper to the designated landing area.

(y) **LOADED LENGTH** - The length of the bungee cord when extended to its fullest designed length.

(z) **PLATFORM** - The area attached to a structure from which jumper falls or jumps.

(aa) **PREPARATION AREA** - The area where the jumper is prepared for jumping. The preparation area shall be separate from the jump area.

(bb) **RIGGING SYSTEM** - The bungee cord plus any webbing or rope connected to the bungee cord which is of variable lengths set by the jump master for each jumper.

(cc) **RECOVERY AREA** - An area next to the landing area, where the jumper may recover from the jump before returning to the public area.

(dd) **SAFE WORKING LOAD (SWL)** - The maximum rated load as determined by the manufacturer which can be safely handled under specified conditions, by a machine, equipment or component of the rigging system.

(ee) **SAFETY BELT** - A belt designed to fit around the waist of a person which can be attached to either an anchor point or safety line.

(ff) **SAFETY HARNESS** - An assembly to be worn by an operator. It is designed to be attached to a safety line and prevent the jump site operator from falling.

(gg) **SAFETY HOOK** - A hook with a latch to prevent rigging or loads from accidentally slipping off the hook.
(hh) **SAFETY LINE** - A line used to connect a safety harness or belt to an anchor point.
(ii) **SAFETY SPACE** - A space extending beyond the jump zone as a safety factor.
(jj) **SITE OPERATING MANUAL** - The document containing the procedures and forms for the operation of all bungee jumping activities and equipment.
(kk) **STRUCTURE** - A permanent structure constructed solely for the purpose of bungee jumping.
(ll) **TANDEM JUMPING** - The practice of two people harnessed together while jumping simultaneously from the same jump platform. **TANDEM JUMPING IS PROHIBITED.**
(mm) **TESTING AUTHORITY** - An organization acceptable to the department for the purpose of testing the performance of bungee cords.
(nn) **UNLOADED LENGTH** - The length of the bungee cord without load or stress applied.

Authority O.C.G.A. Sec. 25-15-53 **History.** Original Rule entitled "Definitions" adopted. F. Jan. 10, 1992; eff. Jan. 30, 1992. **Amended:** ER 300-8-3-0.1-.02. 120-3-27-.45 – 120-3-27-53 F. Sept. 24, 1992; eff. Sept. 18, 1992, the date of adoption, to remain in effect for a period of 120 days or until the adoption of a permanent Rule covering the same subject matter superseding this ER, as specified by the Agency. **Amended:** Permanent Rule adopted. F. Feb. 8, 1993; eff. Feb. 28, 1993.

**120-3-27-.46 Site and Operating Approval.**

(1) The operator shall obtain a permit from the Department of Labor, Safety Engineering Section to operate on the site. The initial permit fee shall be $5,000.00. Each permit shall be renewed annually, at a cost of $1,000.00.
(2) Each site shall be inspected by the Department quarterly, at a cost of $500.00. The cost of one quarterly inspection shall be included in the annual permit renewal.
(3) Site Plan and Equipment Design and Construction:
(a) A report shall contain site plans, safety zones, drawings and specifications of equipment and structures which shall be submitted to the department prior to construction.
(b) Inspections shall be conducted at the discretion of the department.
(4) The owner shall provide a certificate of insurance to the department covering any spectator, and any patron in bungee jumping in the amount of one million dollars ($1,000,000.00) per occurrence.


**120-3-27-.47 Safety Space.**

(1) Each bungee jump site shall maintain a side safety space of twenty (20) feet in all directions.
(2) Where jumps occur over water, the water shall be at least nine (9) feet deep. The vertical safety space shall be at least sixty (60) inches above the water. However, if the depth of the water is greater than nine (9) feet, no vertical safety space is needed.
(3) Where jumps occur over land an air bag or net is used. The vertical safety space shall
be at least sixty (60) inches above the air bag or net.

120-3-27-.48 Permanent Platform.

(1) The Safe Working Load (SWL) shall be determined by the maximum weight on the platform at any one time, with a safety factor of not less than five (5) times the maximum designed platform weight.
(2) When the platform is not an integral part of the structure, the attachment devices and the part of the structure to which they are attached, shall have a safety factor of at least five (5) over the total load.
(3) The platform shall have a non-slip surface.
(4) The platform shall have anchor points for safety harnesses, designed and placed to best suit the movements of anyone on the platform.
(5) The platform shall be fitted with a permanent fence separate from the jump point to contain the jumper during preparation.
(6) There shall be a gate across the jump point which shall remain closed when a jumper is not present.
(7) The jump master shall stop the jumping operation when the wind speed affects the safe operations on the jump platform and/or the recovery area.


120-3-27-.49 Lowering System.

(1) The system for lowering the jumper to the landing pad shall be operated by either the jump operator or jump master.
(2) There shall be an alternative method of jumper recovery should the main lowering system fall.


120-3-27-.50 Bungee Cord Requirements.

(1) The operating length of a bungee cord at its maximum designed dynamic load shall not exceed four (4) times its unloaded length.
(2) The cord material and sheathing to be used shall be clearly specified in the site operating manual.
(3) The cord and its non-metallic connectors shall be destroyed when one of the following conditions occur:
   (a) Exposure to light exceeds 250 hours. This does not apply when the cord cover or sleeve fully protects all of the cord from visible and ultra-violet exposure.
   (b) Six (6) months from the date of manufacture.
   (c) Evidence of threads exhibiting wear, such as bunched threads, uneven tension
between threads or thread bands.
(d) Broken threads in excess of five percent (5%).
(e) After contact with solvents, corrosive or abrasive substances.
(f) Any other flaws found.
(g) As the bungee cord stretches over the course of its jump life, the dynamic load required to extend the bungee to four (4) times its unloaded length will reduce. When this dynamic load reduces to less than the maximum designed dynamic load, the cord shall be destroyed.
(h) After a maximum of five hundred (500) jumps using that cord.
(i) When the cord or its connectors are not in compliance with the manufacturer's specifications.
(j) Any particular cord shall not be used for successive jumps. At least five (5) minutes must be provided between jumps from a particular cord, to allow the cord to fully return to its original unloaded length.
(4) Bungee cords must be examined daily. Before starting the day's operations, the jump master shall visually inspect the entire length and circumference of the bungee cord for signs of wear. The inspection shall be repeated at least four (4) times during daily operation and recorded in the site log.
(a) When unexpected changes in bungee cord performance occur, the bungee cord is to be replaced immediately. The bungee cord shall be subjected to inspection and testing as required in these regulations.


120-3-27-.51 Jump Harness.

(1) A jump harness shall be either a full body harness or a seat harness with shoulder straps.
(2) A jump harness shall be available to fit the range of patron sizes accepted for jumping.


120-3-27-.52 Ropes.

All ropes for holding and/or lowering the jumper shall have a breaking load of at least 6,000 pounds.


120-3-27-.53 Hardware.
(1) Carabiners shall be the screw gate type, manufactured of hardened steel, with at least a minimum breaking load of 6,000 pounds.
(2) Pulleys and shackles shall be manufactured of hardened steel and shall have a minimum breaking load of at least 6,000 pounds.
(3) All pulleys shall be compatible with the rope size.
(4) Webbing shall be flat or tubular mountaineering webbing or equivalent with a minimum breaking load of at least 6,000 pounds. If military specification cords are used, all webbing will have redundant connections.