

**STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

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Add New Subchapter 6.2 to read:

Subchapter 6.2. Permanent Amusement Ride Safety Orders

Article 1. Application

§ 3195.1. Application.

These safety orders apply to all permanent amusement rides, defined in Division 5, Part 8.1, Section 7921 of the California Labor Code, operated anywhere in California.

NOTE: For administrative regulations on permanent amusement rides see Title 8, California Code of Regulations, Chapter 3.2, Subchapter 2., Regulations of the Division of Occupational Safety and Health, Article 6. Administrative regulations address requirements on certificate of compliance, inspections, certification of Qualified Safety Inspectors, insurance requirements, accident report and notification, fee schedules, etc.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

Article 2. Definitions

§ 3195.2. Definitions.

(a) "Authorized personnel" are persons who have been instructed in the operation and/or maintenance of the equipment and designated by the owner to operate or maintain the equipment.

(b) An "incident" is a mechanical malfunction, including failure, of a permanent amusement ride where no injuries occur.

(c) For all other definitions see Title 8, California Code of Regulations, Subchapter 2, Regulations of the Division of Occupational Safety and Health, Article 6, Section 344.6.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3, 7921 and 7923, Labor Code.

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Article 3. Design and Manufacture of Permanent Amusement Rides

§ 3195.3. General Design and Manufacture.

(a) The owner/operator shall ensure that the design and manufacture of permanent amusement rides placed in service after [*] complies with the American Society for Testing and Materials (ASTM) F 1159-97a "Standard Practice for the Design and Manufacture of Amusement Rides and Devices," which is hereby incorporated by reference.

(b) The owner/operator shall ensure that the manufacturer's design and calculation documents, specified in Section 4.1 of ASTM F 1159-97a, the drawings and records specified in Section 4.2, and the testing documents and performance records specified in Section 4.3, are available for review by the Division during any of the Division inspections conducted pursuant to Title 8, Section 344.8, Article 6, Regulations of the Division of Occupational Safety and Health.

(c) If after an inspection for which no engineering calculations are available from the manufacturer or fabricator on a particular permanent amusement ride, and the permanent amusement ride was involved in prior accidents/incidents or other problematic operational performance, the Division may require the owner/operator to provide to the Division a stress analysis of the permanent amusement ride. The stress analysis shall be signed and stamped by a licensed engineer. When the structural analysis on a particular permanent amusement ride is accepted by the Division, it shall be deemed to apply to all rides of the same make and model where there have been no major modifications.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3, 7921 and 7923, Labor Code.

Article 4. Testing Performance of Permanent Amusement Rides

§ 3195.4. Required Testing.

(a) Testing of all permanent amusement rides shall comply with ASTM F 846-92 "Standard Guide for Testing Performance of Amusement Rides and Devices," which is hereby incorporated by reference.

(b) The owner/operator shall ensure that the documentation specified in Sections 5, 6, 7, and 8 of ASTM F 846-92 on test procedures developed and performed pursuant to the manufacturer's developmental testing are documented and available for review by the Division during any of the Division inspections conducted pursuant to Title 8, Section 344.8.

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NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

Article 5. Maintenance Procedures for Permanent Amusement Rides

§ 3195.5. Maintenance.

(a) Maintenance procedures for permanent amusement rides shall comply with ASTM F 853-98 "Standard Practice for Maintenance Procedures for Amusement Rides and Devices," which is hereby incorporated by reference.

(b) The owner/operator shall ensure that manufacturer's documented maintenance instructions, specified in Section 4 of ASTM F 853-98, and the documentation for the maintenance performed according to the manufacturer's maintenance instructions, are available for review by the Division during any of the Division inspections conducted pursuant to Title 8, Section 344.8.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

Article 6. Inspection of Permanent Amusement Rides

§ 3195.6. Inspection Procedures.

(a) Inspection of permanent amusement rides shall comply with ASTM F 893-87 "Standard Guide for Inspection of Amusement Rides and Devices," which is hereby incorporated by reference.

(b) The owner/operator shall ensure that the document(s) denoting the manufacturer's quality assurance program, specified in Section 5.1 of ASTM F 893-87, are available for review by the Division during any of the Division inspections conducted pursuant to Title 8, Section 344.8.

(c) The inspection and testing shall be made by or under the direct supervision of authorized personnel.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

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Article 7. Operation Procedures for Permanent Amusement Rides

§ 3195.7. Control of Operations.

(a) Operation procedures for permanent amusement rides shall comply with ASTM F 770-93 "Standard Practice for Operation Procedures for Amusement Rides and Devices," except Section 5. ASTM F 770-93, with the exception of Section 5 is hereby incorporated by reference.

(b) The owner/operator shall ensure that the document denoting the manufacturer's recommended operating instructions, specified in Section 3 of ASTM F 770-93, is available for review by the Division during any of the Division inspections conducted pursuant to Title 8, Section 344.8.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

Article 8. Information Provided for Permanent Amusement Rides

§ 3195.8. Physical Information.

(a) Physical information to be provided for permanent amusement rides installed and operated after [*] shall comply with ASTM F 698-94 "Standard Specification for Physical Information to be Provided for Amusement Rides and Devices," which is hereby incorporated by reference.

(b) The owner/operator shall ensure that the information provided by the manufacturer, pursuant to ASTM F 698-94, on the proper identification, placement, erection, and operation of each permanent amusement ride, is available for review by the Division during any of the Division inspections conducted pursuant to Title 8, Section 344.8.

(c) Permanent amusement rides installed prior to the effective date of this regulation shall have the name and address of the manufacturer (if known), a trade or description name, and model or serial number (if any), the maximum number of passengers, and the maximum safe speed permanently affixed. The required information shall be legibly impressed on a metal plate or equivalent and readily visible and legible at all times.

(d) All permanent amusement rides shall be identified by a registration number provided by the Division. This registration number shall be kept with other pertinent records for the amusement ride or device and be permanently attached to the ride.

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NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

Article 9. Mechanical Requirements for Permanent Amusement Rides

§3195.9. Mechanical Requirements.

(a) Emergency Brakes.

Cars or other permanent amusement ride components shall be provided with emergency brakes when collisions are likely to cause injury or damage if normal controls fail. Ride systems designed for controlled collisions, such as bumper cars, do not require emergency brakes.

(b) Anti Rollback Devices.

Rides that use inclined tracks shall be provided with automatic anti-rollback devices.

(c) Speed Limiting Devices.

A permanent amusement ride capable of exceeding its maximum safe operating speed shall be provided with a maximum speed-limiting device. All mechanical governors with an adjustable speed setting shall be sealed so that the adjustment cannot be changed without breaking the seal. If the seal is broken, the mechanical governor shall be readjusted and resealed per manufacturer specifications prior to placing the ride back into service.

(d) Signal Systems.

Manually controlled signal systems shall be provided under the following circumstances and comply with the following:

(1) Signal systems to warn operators against dispatching other passenger-carrying units shall be provided on all permanent amusement rides where the lack of a signal system could result in collisions and/or injuries to passengers.

(2) Signal systems to start and stop permanent amusement rides shall be provided where the ride operator does not have a clear view of the passengers loading or unloading the ride.

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(3) Signal codes adopted for the operation of permanent amusement rides shall be posted at the operator and signaler's stations. Ride operators shall be trained in the use of the signal codes.

(4) Signals to place the ride in motion shall not be given until all passengers are safely secured within the conveyance and all other persons are a safe distance from the ride.

(5) Signal systems shall be tested at least once each day prior to operation of the ride. Rides shall not be operated if the signal system is not working properly.

(e) Passenger-Carrying Rides.

(1) Parts of permanent amusement rides with which a passenger may come in contact shall be smooth, free from sharp, rough, or splintered surfaces, edges and corners. Those parts shall also be free of protruding studs, bolts, screws, or other projections. Interior parts that a passenger may be forcibly thrown into by the action of the ride shall be adequately padded to prevent injury to passengers.

(2) Self-powered rides operated by passengers shall have the driving mechanism guarded to prevent passengers from gaining access to the mechanism. The overhead screen of bumper car type rides shall not have holes.

(f) Passengers Restraining and Containing Safety Devices.

(1) A restraining or containing device shall be installed in or on tubs, cars, chairs, seats, gondolas, or other carriers if it is deemed necessary after inspection by a Division authorized representative.

(2) Passenger restraining or containing devices used in or on tubs, cars, chairs, seats, gondolas, and other carriers shall be designed, constructed, installed, and maintained to retain, restrain or support the passenger safely. The fastenings shall be of a type that cannot be released inadvertently by the passenger or by other accidental means.

(3) Belts, bars, footrests, and other equipment used to enter, exit, or support passengers shall be provided and maintained in a safe condition. The equipment, anchorage, and fastening shall be of sufficient strength to restrain the passengers.

(g) Control of Operation.

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(1) Permanent amusement rides shall be operated and controlled only by authorized personnel. Authorized personnel shall be in the immediate vicinity of the operating controls during operation, even if automatic devices are used to control the time cycle of the ride.

(2) Permanent amusement rides shall have a stopping device within reach of the authorized personnel at all times.

(3) In addition to the stop switch required by subsection 3195.9(g)(2), each electrically driven permanent amusement ride shall have a disconnect switch within reach of the authorized personnel for use in case of emergency. In lieu of this disconnect switch, a stopping device that must be manually reset may be used.

(4) A permanent amusement ride shall not be used or operated in such a way as to endanger any person.

(5) Areas in which bystanders may be endangered shall be fenced, barricaded, or otherwise guarded against public intrusion. Fences installed or replaced after [*] shall comply with ASTM F 1159-97a.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

Article 10. Water Parks

§ 3195.10. Application.

In addition to the other applicable requirements in Subchapter 6.2, Water Parks shall comply with the requirements in Section 3195.11 through Section 3195.15.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

§ 3195.11. Definitions.

(a) An "aquatic device" is an amusement device with design and operational features that provide patron recreational activity where the primary ride activity involves the purposeful immersion of the patron's body partially or totally in the water. Amusement rides which use water or patron water contact as an incidental part of the ride are not aquatic devices.

(b) A "dispatcher" is an attendant who directly controls the operation at the top of a water slide.

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(c) A "flume" is an inclined channel containing water, which provides a transit path for conveying people on an aquatic device.

(d) A "splash pool" is a pool at the base of the water slide from which sliders exit to the deck.

(e) A "water slide" is an aquatic device using flowing water to provide low friction in a slide bed or flume providing a descending path into a splash pool or runout area at the base of the slide. There may be one or more flumes used on a water slide.

(f) A "water park" is a facility with multiple aquatic devices.

(g) A "wave pool" is an aquatic device that incorporates a machine to generate waves of water.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

§ 3195.12. Plans.

(a) The owner/operator of an aquatic device(s) shall make available to the Division at the Division's initial inspection a complete set of the plans indicating design, placement, erection, operation, etc. The plans for water slides shall include, but not be limited to, detailed drawings of the slide entrance, the water slide, exit from the water slide, and associated structural calculations.

(1) The plans shall be certified by a licensed engineer, indicating they comply with the requirements of this subchapter and that the plans were developed in accordance with accepted engineering practices.

(2) An "as-built document" shall be submitted to the Division upon completion of the installation and prior to public usage.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

§ 3195.13. Operation and Maintenance.

(a) Aquatic device owners/operators shall maintain an operations manual or other document with written instructions for the operation and maintenance of the aquatic device. The manual or

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written instructions shall be readily available at the water park and shall include at least the following:

- (1) General maintenance procedures;
- (2) Equipment operation instructions;
- (3) A written emergency plan including at least the following:
 - (A) A procedure for cessation of operations, where required, when the water supply is cut off or a power outage occurs during operation;
 - (B) Procedures for evacuating patrons from all aquatic devices including the estimated evacuation time; and
 - (C) Crowd control methods during emergency situations.
- (4) Number of attendants necessary to provide surveillance of all areas of the aquatic device. When determining the proper staffing level for an aquatic device, the following shall be considered:
 - (A) Design and type of aquatic device including but not limited to;
Number of entrances to the loading platform;
Number of flumes or tubes;
Length and/or duration of the ride;
Passenger capacity of the ride by weight; and
Maximum number of patrons the ride can accommodate.
 - (B) Proximity of channels to each other that convey patrons down the device;
 - (C) Control of crowds and patrons starting from the top of the water slide;
 - (D) Control of the timing of each patron on the slide;
 - (E) Supervision of all visible portions of the flume;

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- (F) Orderly control of patrons entering the splash pool;
 - (G) Prevention of unsafe behavior in and around the splash pool; and
 - (H) The manufacturer's recommended staffing requirements.
- (5) Maintenance instructions for the aquatic device.
- (b) The owner/operator shall maintain records, including but not limited to, maintenance records, repair records, water quality records, training records, accident/incident records, records demonstrating how proper staffing levels were determined, etc.
 - (c) The owner/operator shall maintain staffing levels in compliance with the written operational instructions in subsection 3195.13(a)(4).
- (1) At least one attendant shall be located in the immediate vicinity of the water slide splash pool. The attendant shall be trained in first aid and certified by a recognized certification organization in life saving techniques.
 - (d) The surfaces and edges of the aquatic device that may come in contact with patrons shall be free from cutting or pinching hazards or any other hazards that may cause injury.
 - (e) The water park shall be fenced or otherwise guarded to prevent unauthorized entry by patrons. Individual aquatic devices need not be fenced or guarded unless the lack of fencing and/or guarding exposes the patrons to injury.
 - (f) Wave pools shall have a buoy line or other device to warn patrons away from the wave generating equipment when recommended by the manufacturer.
- (1) At least one attendant at a wave pool shall have access to a stopping device that will remove power from the wave-making machine.
 - (2) The main drain(s) shall be visible from the wave pool deck.
 - (3) Public access to any wave pool shall be from the zero depth end only.
- (g) Ingress, egress and walking surfaces in water parks shall be maintained so that they are slip resistant and do not retain standing water.

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(h) Durable signs with lettering on a contrasting background shall be permanently and conspicuously posted at each ride indicating the manufacturer's recommended ride patron capacity.

(i) Equipment room(s) shall be locked to prevent unauthorized access.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

Article 11. Record Keeping and Accident/Incident Information Recorded on Permanent Amusement Rides

§ 3195.14. Record Keeping and Accident/Incident Recorded Information.

(a) The owner/operator shall maintain for as long as the ride is in operation, and make available to the Division for review during the annual records audit and inspection conducted pursuant to Section 344.8(d), all of the following records including, but not limited to;

- (1) Employee training records;
- (2) Maintenance, repair, and inspection records for each permanent amusement ride;
- (3) Records of accidents covered by subsection 344.15(a);
- (4) Records of accidents associated with permanent amusement rides due to failure, malfunction, use, or operation of the ride, resulting in any injury not covered in 3195.14(a)(3); and
- (5) Records of incidents associated with permanent amusement rides due to malfunction, including failure and use of the ride, resulting in no injury.

(b) The information on accidents and incidents recorded pursuant to subsection 3195.14(a) shall include but not be limited to the following:

- (1) Date the accident/incident occurred and events causing or related to the accident/incident;
- (2) Name, address, age, and telephone number of person(s) involved, including but not limited to person(s) injured, ride operator, and witness(es);

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(3) Name of the ride and manufacturer of the ride where or on which the accident/incident occurred;

(4) Description of accident/incident; and

(5) Description of injury and treatment provided.

(c) Each accident/incident shall be classified according to the following categories based on the reported or observed reliable information:

(1) "On ride accident/incident" - accident/incident occurred while patron was riding the amusement ride during the operation of the ride;

(2) "Loading and unloading accident/incident" - accident/incident occurred while patron was within the area designated for loading and unloading of the amusement ride;

(3) "Queue line accident/incident" - accident/incident occurred while patron was in line for the amusement ride;

(4) "Other" - accident/incident occurred in a location other than described in (c)(1) through (c)(3) above.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

Article 12. Electrical

§ 3195.15. Electrical Wiring Affecting Permanent Amusement Rides.

The installation of all new electrical wiring for permanent amusement rides shall conform to the applicable requirements of the California Code of Regulations, Title 24, Part 3, California Electrical Code, 1998.

NOTE: Authority cited: Sections 142.3 and 7923, Labor Code. Reference: Sections 142.3 and 7923, Labor Code.

* Effective date of these orders to be filled in by the Office of Administrative Law.