

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

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

TITLE 8: Division 1, Chapter 4, Subchapter 4. Construction Safety Orders
Article 12. Pile Driving and Pile Extraction

Amend Section 1600(g)(1)(B) as follows:

§1600. Pile Driving.

(g) Sheet Pile Access.

(1) If an employee is required to go aloft on sheet piling, the employee shall use an aerial device or ladder.

(A) Employee(s) shall not ride the hammer, crane load block or overhaul ball.

(B) A crane suspended personnel platform may be used for access if used in accordance with Section 1616.6(p) 5004.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

TITLE 8: Division 1, Chapter 4, Subchapter 4. Construction Safety Orders
Article 15. Cranes and Derricks in Construction

Amend Section 1610.1 as follows:

§1610.1. Scope.

(c) Exclusions. This Article does not cover:

(14) ~~Roustabouts~~. Unpowered, rolling material lifts with hand-powered winches (roustabouts).

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1610.3 as follows:

§ 1610.3. Definitions.

A/D Director (Assembly/Disassembly Director). An individual who meets this section's requirements for an A/D director, irrespective of the person's formal job title or whether the person is non-management or management personnel.

Accessory gear. Those items specified by the crane manufacturer as being authorized for use on the load chart such as jibs, blocks, and hooks.

Dedicated channel. A line of communication assigned by the employer who controls the communication system to only one signal person and crane/derrick or to a coordinated group of cranes/derricks/signal person(s).

Dedicated drilling rig. A machine which creates bore holes and/or shafts in the ground.

Designated Person. A person selected or assigned by the employer or the employer's representative, qualified to perform specific duties.

Directly under the load. A part or all of an employee is directly beneath the load.

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

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

Rated capacity limiter. See load moment limiter.

Registered Professional Engineer (RPE). A person who is registered as a professional civil, mechanical, or structural engineer by the State of California and is knowledgeable in the structure and use of the equipment.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1610.4 as follows:

§ 1610.4. Design, Construction and Testing.

The following requirements apply to equipment that has a manufacturer rated hoisting/lifting capacity of more than 2,000 pounds.

(f) Proof load tests and examinations of cranes and their accessory gear shall be conducted as required by General Industry Safety Orders, Section 5022.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1610.9 as follows:

§ 1610.9. Equipment ~~o~~Over Three Tons Rated Capacity.

(a) All cranes and derricks used in lifting service, exceeding three tons rated capacity, and their accessory gear shall not be used until the employer has ascertained that such equipment has been certificated as evidenced by current and valid documents attesting to compliance with the following:

(1) Tests and examinations shall be conducted annually by a currently licensed certifying agency or designee listed in the certifying agency license, and a certificate shall be issued by the certifying agency;

(2) Certificates attesting to current compliance with testing and examination standards of requirements shall be maintained for each crane or derrick and shall be in a form acceptable to the Division. (See Section 4885, Plate V.) A copy of such certification shall be available with each crane and derrick or at the project site.

NOTE: The term "lifting service" as used in this Section is not intended to include operations of the following equipment: (1) Clamshells, draglines and other similar equipment used for casting-

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

Attachment No. 1

Page 4 of 12

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

type work; (2) Pile drivers, other than those using gravity (drop) hammers.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1611.1 as follows:

§1611.1 Assembly/Disassembly - Selection of Manufacturer or Employer Procedures.

When assembling or disassembling equipment (or attachments), the employer shall ~~must~~ comply with all applicable manufacturer prohibitions and shall ~~must~~ comply with either:

- (a) Manufacturer procedures applicable to assembly and disassembly, or
- (b) Employer procedures for assembly and disassembly. Employer procedures may be used only where the employer can demonstrate that the procedures used meet the requirements in Section 1611.4. Note: The employer shall ~~must~~ follow manufacturer procedures when ~~an employer uses~~ using synthetic slings during assembly or disassembly rigging. [See Section 1611.2(r).]

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1612.3 as follows:

§ 1612.3. Power Line Safety (All Voltages) - Equipment Operations Closer Than the Table A Zone.

- (a) Equipment operations in which any part of the equipment, load line, or load (including rigging and lifting accessories) is closer than the minimum approach distance under Table A of Section 1612.1 to an energized power line is prohibited.
- (b) Except where overhead electrical distribution and transmission lines have been de-energized and visibly grounded, the operation, erection, or handling of tools, machinery, apparatus, supplies, or materials, or any part thereof, over energized overhead high-voltage lines is prohibited.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1613 as follows:

§1613. Inspections and Repairs.

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

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1613.2 as follows:

§1613.2. Inspections - Repaired/Adjusted Equipment.

(a) Equipment that has had a repair or adjustment that relates to safe operation (such as: A repair or adjustment to a safety device or operator aid, or to a critical part of a control system, power plant, braking system, ~~load-sustaining structural components~~, load hook, or in-use operating mechanism), shall be inspected by a qualified person ~~certificating agency~~ after such a repair or adjustment has been completed, prior to initial use.

NOTE: Load-sustaining structural components shall be repaired and inspected in accordance with Sections 1613.11 and 1613.12.

(b) The inspection shall meet all of the following requirements:

(1) The qualified person ~~certificating agency~~ shall determine if the repair/adjustment meets manufacturer equipment criteria (where applicable and available).

(2) Where manufacturer equipment criteria are unavailable or inapplicable, the qualified person ~~certificating agency~~ shall:

(A) Determine if a registered professional engineer (RPE) is needed to develop criteria for the repair/adjustment. If an RPE is not needed, the employer shall ensure that the criteria are developed by the qualified person. If an RPE is needed, the employer shall ensure that they are developed by an RPE.

(B) Determine if the repair/adjustment meets the criteria developed in accordance with subsection ~~(b)(a)~~(2)(A).

(3) The inspection shall include functional testing of the repaired/adjusted parts and other components that may be affected by the repair/adjustment.

~~(c)~~ (b) Equipment shall not be used until an inspection under this section demonstrates that the repair/adjustment meets the requirements of subsection ~~(b)(a)~~(1) [or, where applicable, subsection ~~(b)(a)~~(2)].

NOTES: 1. These inspections may be performed by a qualified person for cranes not exceeding 3 tons rated capacity.

2. Proof load tests are required in the case of major modifications or repairs to important structural components, and shall comply with General Industry Safety Orders, Section 5022.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1613.10 as follows:

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

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

§1613.10. Inspections - Wire Rope.

(a) Shift inspection.

(4) Removal from service.

(B) If a deficiency in Category II [see subsection (a)(2)(B)] is identified, operations involving use of the wire rope in question shall be prohibited until:

~~1. The employer complies with the wire rope manufacturer's established criterion for removal from service or a different criterion that the wire rope manufacturer has approved in writing for that specific wire rope, [Editorial note: not an option under GISO, Section 5031]~~

~~2. 1.~~ The wire rope is replaced, or

~~3. 2.~~ If the deficiency is localized, the problem is corrected by severing the wire rope in two; the undamaged portion may continue to be used. Joining lengths of wire rope by splicing is prohibited. If a rope is shortened under this section, the employer shall ensure that the drum will still have two wraps of wire when the load and/or boom is in its lowest position.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Add new Section 1613.11 as follows:

§1613.11. Repairs.

Repairs to load sustaining members and other critical crane and derrick parts shall be performed in accordance with the provisions of General Industry Safety Orders, Section 5034(e) and (f).

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Add new Section 1613.12 as follows:

§1613.12. Damaged Booms.

Prior to further use, boom sections or boom suspension components that have been damaged shall be repaired as prescribed by General Industry Safety Orders, Section 5035.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

Amend Section 1616.1 as follows:

§1616.1. Operation.

(o) During lifting operations, the load, boom, or other parts of the equipment shall not contact any obstruction in a way which could cause falling material or damage to the boom.

~~(x) The operator shall obey a stop (or emergency stop) signal, irrespective of who gives it.~~

(x) The qualified person (rigger) shall be trained and capable of safely performing the rigging operation. All loads shall be rigged by a qualified person (rigger) or by a trainee under the direct visual supervision of a qualified person (rigger).

(aa) The use, care and maintenance of slings shall be in accordance with General Industry Safety Orders, Group 13, Article 101.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1617.1 as follows:

§1617.1. Signals - General Requirements.

(a) A signal person shall be provided in each of the following situations:

- (1) The point of operation, meaning the load travel or the area near or at load placement, is not in full and direct view of the operator.
- (2) When the equipment is traveling, the view in the direction of travel is obstructed.
- (3) Due to site-specific safety concerns, either the operator or the person handling the load determines that it is necessary.

(b) Only qualified persons shall be permitted to give signals-, and the operator shall respond to signals only from a designated signal person.

~~EXCEPTION: A stop signal may be given by any person.~~

EXCEPTION: The operator shall obey a stop or emergency stop signal from any person.

(c) Types of signals. Signals to operators shall be by hand, voice, or audible.

~~(i) Anyone who becomes aware of a safety problem must alert the operator or signal person by giving the stop or emergency stop signal. (NOTE: Section 1616.1(x) requires the operator to obey a stop or emergency stop signal).~~ [Reserved]

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

Amend Section 1617.2 as follows:

§1617.2. Signals - Radio, Telephone or Other Electronic Transmission of Signals.

(d) The signal person shall audibly or visually signal the operator if the signal person becomes aware that communication with the operator has been interrupted during hoisting operations and the operator shall safely stop operations in accordance with Section 1617.1(f).

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1617.3 as follows:

§1617.3. Signals – Voice Signals – Additional Requirements.

(b) Each voice signal shall contain the following three elements, given in the following order: (1) function (such as hoist, boom, etc.), (2) direction; approximate distance and/or speed; (3) function, stop command.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1618.1 as follows:

§1618.1. Operator Qualification and Certification.

(a) Qualifications and Certification...

(b) Option (1): Certification by an accredited crane operator certifying entity.

(c) Option (2): Licensing by a government entity.

(1) For purposes of this section, a government licensing department/office that issues operator licenses for operating equipment covered by this standard is considered a government accredited crane operator testing organization if the criteria in subsection (c)(2) of this section are met.

(2) Licensing criteria.

(A) The requirements for obtaining the license include passing a physical examination and a substance abuse test as prescribed in subsections (b)(1)(A) and (B), and an assessment, by

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

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

written and practical tests, of the operator applicant regarding, at a minimum, the knowledge and skills listed in subsections (b)(1)(C) and (D) of this section.

(B) The testing meets industry recognized criteria for written testing materials, practical examinations, test administration, grading, facilities/equipment and personnel.

(C) The government authority that oversees the licensing department/office, has determined that the requirements in subsections (c)(2)(A) and (B) of this section have been met.

(D) The licensing department/office has testing procedures for re-licensing designed to ensure that the operator continues to meet the ~~technical knowledge and skills~~ requirements in subsection ~~(c)(2)(A) (b)(1)(C) and (D) of this section.~~

(3) A license issued by a government accredited crane operator testing organization that meets the requirements of this option:

(A) meets the operator qualification requirements of this section for operation of equipment only within the jurisdiction of the government entity.

(B) is valid for the period of time stipulated by the licensing department/office, but no longer than 5 years.

(d) Pre-qualification/certification training period.

(e) Effective Dates and Phase-in.

EXCEPTIONS TO SECTION 1618.1:

(1) Operator qualification or certification under this section is not required for operation of derricks, side boom cranes or equipment with a maximum manufacturer-rated hoisting/lifting capacity of 2000 pounds or less.

(2) Operator qualification or certification under this section is not required for operation of articulating/knuckle-boom cranes having a boom length of less than 25 feet or a maximum rated load capacity of less than 15,000 pounds when used to deliver material to a construction site.

(3) Operators of electric line trucks (digger derrick trucks) as defined in Section 2700 of the Electrical Safety Orders and regulated by Section 2940.7 of the High Voltage Electrical Safety Orders. This exception does not include mobile truck cranes designed and built in accordance with the American Society of Mechanical Engineers (ASME) B30.5 standards.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

Amend Section 1619.1 as follows:

§1619.1. Tower Cranes.

(a) This section contains supplemental requirements for tower cranes; all sections of this Article 15 apply to tower cranes unless specified otherwise.

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

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

(b) Erecting, climbing and dismantling.

The erection, climbing (up and down) and dismantling of a fixed tower crane shall comply with the requirements of Title 8, Section 341.1(b)(2) and General Industry Safety Orders, Section 4966. In addition the following supplemental requirements are applicable for all tower cranes.

(3) Foundations and structural supports. Tower crane foundations and structural supports (including both the portions of the structure used for support and the means of attachment) shall be designed by the manufacturer or a certified agent.

(A) The controlling entity shall ensure the tower crane foundations and structural supports are installed in accordance with the manufacturer's or certified agent's instructions.

(B) The controlling entity shall provide a written statement of compliance with subsection (A), above, to the erecting entity prior to erection or jump of the tower crane.

(C) The top of the support/foundation shall be accessible and free of debris, materials and standing water. No materials shall be stored on the support unless approved by a qualified person. The foundation and fasteners shall remain accessible and visible for inspection at all times.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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

Attachment No. 1

Page 11 of 12

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

TITLE 8: Division 1, Chapter 4, Subchapter 7. General Industry Safety Orders
Group 13. Cranes and Other Hoisting Equipment
Article 91. Definitions

Amend Section 4885 as follows:

§4885. Definitions.

Accessory. A secondary part or assembly of parts which contribute to the over-all function and usefulness of a machine.

Accessory gear. Those items specified by the crane manufacturer as being authorized for use on the load chart such as jibs, blocks, and hooks.

Angle Indicator (Boom). An accessory which measures and indicates the angle of boom to the horizontal.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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

Attachment No. 1
Page 12 of 12

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

TITLE 8: Division 1, Chapter 4, Subchapter 7. General Industry Safety Orders
Group 13. Cranes and Other Hoisting Equipment
Article 98. Operating Rules

Amend Section 4999 as follows:

§4999. Handling Loads.

(f) During Hoisting:

(1) There shall be no sudden acceleration or deceleration of the moving load.

(2) ~~Inadvertent contact with obstructions shall be prevented.~~ The load, boom, or other parts of the equipment shall not contact any obstruction in a way which could cause falling material or damage to the boom.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.