

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

PROPOSED STATE STANDARD,
TITLE 8, CHAPTER 4

Amend Section 1600 as follows:

§1600. Pile Driving.

(a) Site-Specific Safety Plan.

(1) A written safety plan specific to the job site shall be developed, implemented and maintained by a competent person and the identity of the competent person shall be documented. The site-specific safety plan shall be developed prior to the start of the job and shall include, but not be limited to the following elements:

(A) An outline of the construction plan and the steps involved in drilling and/or driving piles.

(B) A list of the potential safety and health hazards for each step and procedures necessary to protect employees from identified hazards including:

1. Means and methods to minimize employee exposure to an operating drill and/or hammer.
2. Means and methods to provide safe access, handling, storage, and setup of piles, equipment and vehicles.

(C) A projected work schedule and minimum number of employees needed to safely complete each step.

(D) Special job procedures, equipment and/or training such as but not limited to blasting operations, shoring, sloping and benching requirements, emergency response procedures, traffic control, confined space operations, proximity to overhead lines and work over water.

(2) Any changes to the site-specific safety plan shall be approved by the competent person and the identity of the competent person shall be documented.

(3) A copy of the Site-Specific Safety Plan with all approved changes shall be available on site and shall be provided to the Division upon request.

~~(b)(a) When conditions are such that a worker might logically be expected to work or be under the hammer, the hammer shall be secured in the leads by means of an adequate chock, toggle, or other device to safely support the hammer.~~

~~EXCEPTION: Where it is necessary for a worker, momentarily, to lean through the leads to spot a pile under hammer, it is not required that the hammer be secured in the leads.~~

~~A blocking device capable of safely supporting the weight of the hammer shall be provided for placement in the leads under the hammer at all times while employees are working under the hammer.~~

~~(b) Steam hose leading to a steam or jet pipe shall be securely attached to the hammer with an adequate length of at least 1/4 inch diameter chain or equivalent rated capacity wire rope to prevent whipping in the event the joint of the hammer is broken. Air hammer hoses shall be provided with the same protection as required for steam lines.~~

~~(c) Steam and air hammer hose connections.~~

~~Safety chains, or equivalent means, shall be provided for each hose connection to prevent the line from thrashing around in case the coupling becomes disconnected.~~

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PROPOSED STATE STANDARD,
TITLE 8, CHAPTER 4

(1) All pile driver hose connections including those to pile driver hammers, pile ejectors, or jet pipes shall be securely tethered with an adequate length of at least ¼ inch (0.635 cm) alloy steel chain having 3,250 pounds (1,500 kg) rated capacity (working load limit), or equivalent strength alloy steel cable, to prevent the line from thrashing around in case the coupling becomes disconnected.

(2) Chains or wire rope shall not be shortened with knots, bolts or other makeshift devices.

(d) Wherever it is necessary for ~~workers~~ employees to work aloft on pile drivers ~~in normal operation while pile is being driven~~, and the fall distance exceeds 7 ½ feet, working platforms shall be provided.

Such platforms shall be of sufficient size so that the ~~worker~~ employee can easily avoid contact with the hammer. It shall be surrounded on all sides, except between the hammer leads, with a railing or guard line 42 inches to 45 inches in height. Guard lines shall be ~~drawn~~ taut and shall be at least 3/8 inch wire rope, or 1-inch Manila rope or equivalent. If rigid railings are used, they shall be constructed in accordance with ~~provisions of Section 1620, Article 16, with the~~ EXCEPTION: ~~that~~ Pipe or structural steel railings may be used if of equivalent strength may be used.

(e) ~~Precautionary measures~~ Precautions shall be taken to ensure that objects are secured against wind and accidental displacement, to which will prevent tools, material, and equipment from falling off elevated platforms. There shall be a toe board at least 3 1/2 inches high Toeboards shall be installed on all sides of the platform in accordance with Section 1621(b).

(f) ~~Fixed~~ Leads shall be provided with a ladder, and adequate rings, or similar attachment points, so that the ~~loft worker~~ employee may engage the a personal fall ~~arrest~~ protection system to the leads. The personal fall ~~arrest~~ protection system used shall comply with the requirements of Section 1670 Article 24. If the leads are provided with loft platform(s), such platform(s) shall be protected by standard guardrails.

(g) Stirrups shall be provided for use on sheet piles or a mechanical device shall be used to guide the pile into place. If ~~a worker~~ an employee is required to go aloft on sheet piling, the ~~worker~~ employee shall use a ladder ~~or be carried up in a boatswain's chair.~~ EXCEPTION: Where it is unsafe to use a ladder, a boatswain's chair may be used in accordance with Section 1662.

(h) ~~The worker~~ Employee(s) shall not ride the hammer.

(i) Where work is to be performed, walkways at least 20 inches in width shall be provided across piles or other open work with the exception of those piles on which the driver is standing.

(j) Where a drop hammer is used for driving piling other than sheet piling, a driving head or bonnet shall be provided to bell the head of the pile and hold it true in the leads.

(k) Ring buoys shall be provided in accordance with Article 13 and located where readily available at intervals not exceeding 200 feet on all structures over water under the course of construction.