

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

2520 Venture Oaks, Suite 350
Sacramento, CA 95833
(916) 274-5721
FAX (916) 274-5743
www.dir.ca.gov/oshsb



Attachment No. 2

INITIAL STATEMENT OF REASONS**CALIFORNIA CODE OF REGULATIONS**

TITLE 8: Chapter 4, Subchapter 4, Article 12, Sections 1600 and 1601
of the Construction Safety Orders

Pile Driving and Methods of Unloading Piles**SUMMARY**

This rulemaking action is the result of two petitions submitted to the Occupational Safety and Health Standards Board (OSHSB, i.e., Board) regarding pile driving regulations contained in Construction Safety Orders (CSO) Article 12, Sections 1600 and 1601 (OSHSB Petition File Nos. 410 and 413) submitted by Mr. Dennis Jones, Safety Committee Chairman, and Mr. Rod Hurd, Business Representative, both of the Pile Drivers, Bridge, Dock and Wharf Builders (PBDW), Local Union 2375. Petition No. 410, submitted by Mr. Jones, requested the Board to address concerns about outdated terminology and discrepancies between Federal OSHA standards in Title 29, Code of Federal Regulations (29 CFR) Section 1926.603(c)(5) and existing state standards regarding employee exposures to an operating hammer. Petition No. 413, submitted by Mr. Hurd, regarded crew size issues. On June 15, 2000, the Occupational Safety and Health Standards Board granted the petitions to the extent that Board staff was directed to convene an advisory committee to consider the Petitioners' requests. An advisory committee was convened on August 18, 2000, to review CCR Title 8 pile driving regulations contained in CSO Article 12, Sections 1600 and 1601. This proposed rulemaking action represents Board staff's recommendations based on the consensus agreements of the ad hoc committee.

Existing requirements for pile driving, as found in Article 12, Section 1600, provide for safe working conditions in the proximity of the hammer, including securing the hammer when employees must work under the hammer, methods of securing hose connections to prevent hazards to employees should couplings become disconnected, provisions for employees working aloft when the hammer is in operation, precautions to be taken when tools or material are aloft, provisions for attachment of personal fall protection systems, safe work practices for hoisting of, installation of and work upon piling, including sheet piling, pile driving work over water, stabilization of pile driving rigs, and work in confined spaces surrounding piles. Section 1601 prescribes a number of work practices for unloading piles from trucks, trailers, and railroad flat cars.

Board staff agrees with the advisory committee's consensus on the need for a performance-based approach to pile driving operations in order to provide safety at least as effective as federal standards with respect for employee safety around operating hammers. The proposal also contains a number of clarifications and updates to replace outdated and unnecessary requirements. The effect on the regulated public will be to promote safe working conditions on and around work sites where piles are being driven by providing a standard that has been updated to address current pile driving practices.

29 CFR 1926.603(c)(5) provides: "When it is necessary to cut off the tops of driven piles, pile driving operations shall be suspended except where the cutting operations are located at least twice the length of the longest pile from the driver." The consensus of the advisory committee was that the federal standard was unreasonable and unworkable on a large number of worksites in California due to tight working conditions frequently encountered. The site-specific safety plan proposed in Section 1600(a) is a performance-based approach to provide safety at least as effective as prescriptive requirements found in 29 CFR 1926.603(c)(5). Board staff recommends, in conjunction with the committee consensus, that a performance-based approach was a practical way to provide equivalency with federal standards while offering employers flexibility in achieving that goal.

SPECIFIC PURPOSE AND FACTUAL BASIS OF PROPOSED ACTION

Section 1600. Pile Driving.

Subsection (a)

Existing subsection (a) is proposed for revision and renumbering as subsection (b). A new subsection (a) is proposed which prescribes a site-specific safety plan. Prior to the start of a job, the employer shall develop a written site-specific safety plan, a copy of which shall be available on-site and provided to the Division upon request. The plan shall consist of: an outline of the construction plan and the steps involved in drilling and/or driving piles; a list of potential safety and health hazards for each step and precautions to be taken, i.e., means and methods to minimize employee exposure to operating drill and/or hammer and means and methods to provide safe access, handling and setup of piles, equipment and vehicles; a projected work schedule and minimum number of employees needed to safely complete each step; and special site-specific procedures, equipment and/or training such as for blasting operations, shoring, traffic control, confined space operations, overhead power lines, work over water, etc. This section is necessary in order to provide safety at least as effective as that required by 29 CFR 1926.603(c)(5). The federal standard was not adopted verbatim since the advisory committee consensus was that the federal standard was unworkable in California and could shut down most jobsites if rigidly enforced. The proposed site-specific safety plan was developed to provide equivalent safety while providing flexibility in addressing unique site conditions. The proposed new subsection is necessary in order to provide safety to employees and the public that is at least as effective as that required by federal standards, while providing employers flexibility in complying with the standard.

Subsection (b)

Existing subsection (a) requires that when employees are working 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. It is proposed to revise and renumber subsection (a) as subsection (b) and delete the out-dated and vague terminology, “chock, toggle, or other device.” Neither “chock” nor “toggle” are terms used in contemporary pile driving, and “other device” is inexact and might result in the use of an inappropriate device to secure the hammer. The proposed revision replaces the existing standard with the federal standard contained in 29 CFR 1926.603(a)(5) verbatim. The revision is necessary to clarify the requirements for securing the hammer when employees are working under it and harmonize California and federal standards.

Subsection (c)

The requirements of existing subsections (b) and (c) have been combined into proposed new subsection (c). Existing subsection (b) is nearly verbatim of 29 CFR 1926.603(a)(9), which requires steam and/or air hose connections for pile drivers to be secured by chains or cables to prevent whipping in the event the joint at the hammer is broken. Existing subsection (c) is verbatim of 29 CFR 1926.603(a)(10), which requires safety chains or equivalent means to be provided for each hose connection in order to prevent the line from thrashing around in case the coupling becomes disconnected. It is proposed to combine and amend these requirements to clarify that all pile driver hose connections, including those at pile driver hammers, pile ejectors, or jet pipes, are subject to the same tether requirements. Furthermore, the proposed revisions will prescribe minimum cross-section and strength requirements for chain and cables used for this purpose and prohibit shortening chains and cables with makeshift methods. The revisions are necessary to provide minimum standards for safety tethers and to prohibit practices that are known to weaken the strength of the tethers.

Subsection (d)

The existing subsection requires working platforms to be provided for employees when it is necessary for them to work aloft on operating pile drivers and prescribes standards for railings or guard lines. It is proposed to revise this subsection to require that platforms be provided wherever it is necessary for employees to work aloft on pile drivers while pile is being driven and the fall distance exceeds 7 ½ feet. Other minor editorial revisions are also proposed. The proposed revisions are necessary to clarify the existing requirement for provision of a working platform whenever it is necessary for the employee to be aloft while pile is being driven and to establish a fall distance trigger height of 7 ½ feet above which a working platform shall be provided.

Subsection (e)

Existing subsection (e) requires precautionary measures to be taken, including the use of toeboards, to prevent tools, material and equipment from falling off elevated platforms. It is proposed to clarify that wind and accidental displacement are the forces to be guarded against, and that toeboard height conforms with Section 1621(b). The proposed revisions are necessary to

clarify when protection from falling objects is required and to ensure consistency with other Construction Safety Order requirements.

Subsection (f)

Existing subsection (f) is the California equivalent of 29 CFR 1926.603(a)(8). The existing federal standard contains obsolete requirements for provisions for the worker to engage his safety belt lanyard to the leads. It is proposed to revise the fall protection reference from Section 1670 to the more comprehensive Article 24. The proposed revision is necessary to provide all fall protection options available under Article 24, rather than limiting the option to strictly personal fall arrest systems.

Subsection (g)

Existing subsection (g) prescribes stirrups for use on sheet piles or mechanical devices for guiding the pile into place. A ladder or boatswain's chair is required if it is necessary for the employee to go aloft on sheet piling. It is proposed to revise the standard to prescribe a ladder as the primary means of going aloft on sheet piling. An "exception" is proposed that will permit the use of a boatswain's chair, in accordance with Section 1662, where it is unsafe to use a ladder. The revisions are necessary to permit the use of a boatswain's chair when the use of a ladder is deemed unsafe and prescribe the manner in which a boatswain's chair may be used safely.

Subsection (w)

Existing subsection (w) requires that when driving jacketed piles, all access pits shall be provided with ladders and bulkheaded curbs to prevent material from falling into the pit. A revision is proposed to add an informational "note" to direct the regulated public to General Industry Safety Order (GISO) Section 5158 for confined space operations. The proposed revision is necessary to serve as a reminder that the confined space requirements contained in Section 5158 may be applicable to work performed in the pit.

Proposed new subsection (x)

Proposed new subsection (x) requires that hoisting of piling shall be done by use of a hook with a means to prevent accidental disengagement or a shackle shall be used in place of a hook. The proposed new subsection is necessary to prevent accidental disengagement of the load from the lifting hook.

Proposed new subsection (y)

Proposed new subsection (y) requires that taglines be used to control unguided piles and free hanging/free flying hammers. The proposed new subsection is necessary to clarify that piles and free hammers are hazardous objects requiring control.

Proposed new subsection (z)

Proposed new subsection (z) requires that hammers be lowered to the bottom of the leads while the pile driver is being moved. The proposed new subsection is necessary to reduce the possibility that the pile driver could become unstable due to uneven terrain or inertial effects of the elevated hammer.

Section 1601. Methods of Unloading Piles.

The consensus of an ad hoc committee review was that this section contains regulations that are outdated, unnecessary and irrelevant to current industry practices. Since there is no federal counterpart to this section, it is proposed to replace the entire section with the requirement that piles be unloaded in a controlled manner so that employees are not exposed to the hazard of rolling or falling piles. The proposed revisions are necessary to eliminate outdated, unnecessary and irrelevant regulations while maintaining the intent of the existing requirement that employees be protected from the hazards of rolling or falling piles during unloading operations

DOCUMENTS RELIED UPON

1. OSHSB Petition File No. 410: Petition to amend Section 1600 of the Construction Safety Orders regarding outdated terminology and discrepancies between Federal OSHA standards in 29 CFR 1926.603(c)(5); received January 5, 2000; filed by Mr. Dennis Jones, Petitioner, Safety Committee Chairman, representing Pile Drivers, Bridge, Dock and Wharf Builders (PBDW), Local Union 2375.
2. OSHSB Petition File No. 413: Petition to amend Section 1600 of the Construction Safety Orders with regard to pile driving crew size standards, received February 22, 2000; filed by Mr. Ron Hurd, Petitioner, Business Representative, representing Pile Drivers, Bridge, Dock and Wharf Builders (PBDW), Local Union 2375.
3. Occupational Safety and Health Standards Board Petition Decision re: Petition File Nos. 410 and 413, dated June 15, 2000.

These documents are available for review Monday through Friday from 8:00 a.m. to 4:30 p.m. at the Standards Board Office located at 2520 Venture Oaks Way, Suite 350, Sacramento, California.

REASONABLE ALTERNATIVES THAT WOULD LESSEN ADVERSE ECONOMIC
IMPACT ON SMALL BUSINESSES

No reasonable alternatives were identified by the Board and no reasonable alternatives identified by the Board or otherwise brought to its attention would lessen the impact on small businesses.

SPECIFIC TECHNOLOGY OR EQUIPMENT

This proposal will not mandate the use of specific technologies or equipment.

COST ESTIMATES OF PROPOSED ACTION

Costs or Savings to State Agencies

No costs or savings to state agencies will result as a consequence of the proposed action.

Impact on Housing Costs

The Board has made an initial determination that this proposal will not significantly affect housing costs.

Impact on Businesses

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states.

Cost Impact on Private Persons or Businesses

The Board is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

Costs or Savings in Federal Funding to the State

The proposal will not result in costs or savings in federal funding to the state.

Costs or Savings to Local Agencies or School Districts Required to be Reimbursed

No costs to local agencies or school districts are required to be reimbursed. See explanation under "Determination of Mandate."

Other Nondiscretionary Costs or Savings Imposed on Local Agencies

This proposal does not impose nondiscretionary costs or savings on local agencies.

DETERMINATION OF MANDATE

The Occupational Safety and Health Standards Board has determined that the proposed regulations do not impose a local mandate. Therefore, reimbursement by the state is not required pursuant to Part 7 (commencing with Section 17500) of Division 4 of the Government Code because the proposed amendments will not require local agencies or school districts to incur additional costs in complying with the proposal. Furthermore, these regulations do not constitute a "new program or higher level of service of an existing program within the meaning of Section 6 of Article XIII B of the California Constitution."

The California Supreme Court has established that a “program” within the meaning of Section 6 of Article XIII B of the California Constitution is one which carries out the governmental function of providing services to the public, or which, to implement a state policy, imposes unique requirements on local governments and does not apply generally to all residents and entities in the state. (County of Los Angeles v. State of California (1987) 43 Cal.3d 46.)

These proposed regulations do not require local agencies to carry out the governmental function of providing services to the public. Rather, the regulations require local agencies to take certain steps to ensure the safety and health of their own employees only. Moreover, these proposed regulations do not in any way require local agencies to administer the California Occupational Safety and Health program. (See City of Anaheim v. State of California (1987) 189 Cal.App.3d 1478.)

These regulations do not impose unique requirements on local governments. All employers - state, local and private - will be required to comply with the prescribed standards.

EFFECT ON SMALL BUSINESSES

The Board has determined that the proposed amendments may affect small businesses.

ASSESSMENT

The adoption of the proposed amendments to these regulations will neither create nor eliminate jobs in the State of California nor result in the elimination of existing businesses or create or expand businesses in the State of California.

ALTERNATIVES THAT WOULD AFFECT PRIVATE PERSONS

No reasonable alternatives have been identified by the Board or have otherwise been identified and brought to its attention that would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.