

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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Attachment No. 2

INITIAL STATEMENT OF REASONS

CALIFORNIA CODE OF REGULATIONS

The following information is provided in regard to the proposed revisions to the California Code of Regulations, Title 8, Chapter 4, Subchapter 7, Article 98, Section 5004, Article 101, Section 5047 of the General Industry Safety Orders and Subchapter 18, Article 6, Section 8379 of the Ship Building, Ship Repairing and Ship Breaking Safety Orders.

Use of Personnel Suspended Platforms from Crane or Derrick

SUMMARY

This rulemaking proposal is the result of a Division of Occupational Safety and Health (Division) Request for New, or Change In Existing Safety Order (Form 9-040), in which the Division proposes amendments to General Industry Safety Orders (GISO), Sections 5004 and 5047 and Section 8397 of the Ship Building, Ship Repairing and Ship Breaking Safety Orders (SSSSO) with regard to the use of fiber rope or synthetic web slings.

The Division's proposal is based on the American National Standards Institute (ANSI) and the American Society of Mechanical Engineers (ASME) standard. ANSI/ASME B30.23-1998 Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks and Slings Personnel Lifting Systems prohibits the use of synthetic webbing, natural, or synthetic fiber rope slings. The ANSI/ASME B30.23 standard represents an industry consensus and an engineering standard.

These proposed standards are necessary to clarify what material is acceptable (wire rope) for the use of personnel suspended platforms from crane or derrick, and what materials are not allowed (natural or synthetic fiber rope slings). This proposal would ensure that employers use acceptable material for personnel suspended platforms.

Damage to fiber rope and synthetic web slings cannot always be determined through visual inspection by a qualified person as required by existing Title 8 rigging standards and manufacturer's recommendations. The inability to detect damage before the sling is placed in service could result in catastrophic failure that could result in serious employee injury or a fatality. Because fiber rope and synthetic webbing is damaged by heat, flame, corrosive materials and abrasion, it can be hazardous to use them with personnel platforms intended to suspend employees and equipment, which may include welding and sandblasting equipment.

Board staff contacted a leading manufacturer of suspended personnel work platforms and man baskets and a leading manufacturer of synthetic web slings, fiber and wire rope. The manufacturers' representatives indicated they support the proposed amendments and stated that synthetic web slings and fiber rope should never be used to suspend personnel platforms because they are easily cut and have poor abrasion resistance when compared to wire rope and steel chain. In addition, acids, caustics and ultraviolet rays from the sun damage synthetic slings. Moisture and temperatures above 194° F will weaken synthetic slings and fiber rope leading to catastrophic failure. The temperature can achieve this level when using various torches. This is corroborated by information from the Canadian Centre for Occupational Health and Safety stating the same and cautioning employers to select slings and suspending means made of the right material for the job. The suspended work platform representative stated that his company's personnel platforms are designed to accept only 1/2 inch, 5/8 inch or 3/4 inch diameter wire rope, not synthetic web slings or fiber rope. The web sling fiber and rope representative stated that his company does not provide synthetic web slings or fiber rope for use with personnel platforms.

Section 5004. Crane or Derrick Suspended Personnel Platforms.

This section pertains to the design, construction, testing, use and maintenance of personnel platforms and the hoisting of personnel platforms on load lines of cranes and derricks.

Subsection (d) contains requirements addressing operational requirements including but not limited to the methods and manner for hoisting employees on platforms, use of load lines, strength requirements of load lines, use of load and boom hoist drum brakes, swing brakes and locking devices, crane stability, and rated platform load capacity.

A new paragraph (7) is proposed which would specify the use of wire rope as the only acceptable material to suspend personnel platforms.

The proposed amendment is necessary to ensure that employers use wire rope to elevate personnel platforms. Since the fiber rope sling prohibition is already consistent with standard industry practice, national consensus standards and platform manufacturer's recommendations, the proposal would have no effect on most employer operations, but only in isolated incidences such as when synthetic web slings or fiber rope is the quickest and easiest immediate alternative.

Section 5047. Natural and Synthetic Fiber Rope Slings.

This section pertains to sling use, safe operating temperatures, splicing, end attachments, removal from service and repairs of natural and synthetic and fiber rope slings.

Subsection (a) pertains specifically to fiber rope sling use specifically rope made from three strand construction, rope diameters, and use in accordance with manufacturers recommendations. A new paragraph (4) is proposed that prohibits the use of natural and synthetic fiber rope slings for suspending personnel platforms.

The proposed amendment is necessary to ensure that employers do not use natural and synthetic fiber rope slings to elevate personnel platforms. Since the fiber rope sling prohibition is already consistent with standard industry practice, national consensus standards and platform

manufacturer's recommendations, the proposal would have no effect on most employer operations, but only in isolated incidences such as when synthetic web slings or fiber rope is the quickest and easiest immediate alternative.

Section 8379. Slings and Pendants.

This Section pertains to the use of slings and pendants at shipyards and requires all slings and pendants to comply with GISO Articles 96 and 101 and addresses: visual inspections, use of spreaders and strongbacks, use of wire rope slings, cradling materials in slings, use of thimbles, and securing the loose ends of slings and pendants.

Subsection (e) specifically addresses the use of wire rope slings and pendants when handling plates or material on and off boats under construction. This section permits the use of fiber rope to handle materials that would be damaged by wire rope such as lumber, lumber products, small bundles of pipe and materials subject to such damage.

An amendment is proposed to add language in subsection (e) pertaining to lifting personnel in personnel platforms, to specify that wire rope slings and/or pendants be used.

The proposed amendment is necessary to ensure that employers use wire rope slings or wire rope pendants to elevate personnel platforms. Since the fiber rope sling prohibition is already consistent with standard industry practice, national consensus standards and platform manufacturer's recommendations, the proposal would have no effect on most employer operations, but only in isolated incidences such as when synthetic web slings or fiber rope is the quickest and easiest immediate alternative.

DOCUMENTS RELIED UPON

1. Division of Occupational Safety and Health memorandum dated November 15, 2004, Form 9 Request for New or Change In existing Safety Order (Form 9-040).
2. American National Standards Institute/American Society of Mechanical Engineers (ANSI/ASME) B30.23-1998, Safety Standard for Personnel Lifting Systems.
3. Canadian Centre for Occupational Health and Safety OSH Answers dated April 14, 1998.

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. The Board staff is not aware of any state agencies that use personnel suspended platforms in conjunction with cranes or derricks.

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 a 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. The proposal is based on National Consensus Standard language, which has become standard general and shipyard industry practice.

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. (See Impact on Businesses).

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 standards 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 standards 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.)

The proposed standards do not require local agencies to carry out the governmental function of providing services to the public. Rather, the standards require local agencies to take certain steps to ensure the safety and health of their own employees only. Moreover, the proposed standards 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.)

The proposed standards 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. However, no economic impact is anticipated.

ASSESSMENT

The adoption of the proposed amendments to these standards 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.