

**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](http://www.dir.ca.gov/oshsb)



NOTICE OF PROPOSED MODIFICATIONS TO  
CALIFORNIA CODE OF REGULATIONS  
TITLE 8: Chapter 4, Subchapter 7, Article 7, Section 3328  
of the General Industry Safety Orders

**Definition of Adequate Design**

Pursuant to Government Code Section 11346.8(c), the Occupational Safety and Health Standards Board (Standards Board) gives notice of the opportunity to submit written comments on the above-named standards in which modifications are being considered as a result of public comments and/or Board staff consideration.

On August 20, 2015, the Standards Board held a Public Hearing to consider revisions to Title 8, Section 3328 of the General Industry Safety Orders. The Standards Board received written and oral comments on the proposed revisions. The standards have been modified as a result of these comments and Board consideration.

A copy of the modified text is attached for your information. In addition, a summary of written and oral comments regarding the original proposal and staff responses are included.

Any written comments on these modifications must be received by 5:00 p.m. on November 3, 2015, at the Standards Board Office, 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833 or submitted by fax to (916) 274-5743 or e-mailed to [oshsb@dir.ca.gov](mailto:oshsb@dir.ca.gov). This proposal will be scheduled for adoption at a future business meeting of the Standards Board.

The Standards Board's rulemaking files on the proposed action are open to public inspection Monday through Friday, from 8:00 a.m. to 4:30 p.m., at the Standards Board's Office. Inquiries concerning the proposed changes may be directed to the Executive Officer, Marley Hart, at (916) 274-5721.

OCCUPATIONAL SAFETY AND HEALTH  
STANDARDS BOARD

Date: October 14, 2015

---

Marley Hart, Executive Officer

## **Proposed Modifications**

(Modifications for new language are shown in **bold** and underscored and deleted language are shown in **bold** and strike-out)

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

TITLE 8, DIVISION 1, CHAPTER 4

Amend Section 3328 to read:

§3328. Machinery and Equipment.

(a) ~~All machinery and equipment shall be of adequate design;~~

**(1) shall be designed or engineered to safely sustain all reasonably anticipated loads in accordance with recognized engineering principles;** and

**(2) shall not be used or operated under conditions of speeds, stresses, or loads, or environmental conditions that are contrary to the manufacturer's recommendations or, where such recommendations are not available, the engineered design** ~~which endanger employees.~~

(b) Machinery and equipment in service shall be inspected and maintained as recommended by the manufacturer where such recommendations are available.

(c) Machinery and equipment with defective parts which create a hazard shall not be used.

(d) Machinery and equipment designed for a fixed location shall be restrained so as to prevent walking or moving from its location.

(e) Machinery and equipment components shall be designed and secured or covered (or both) to minimize hazards caused by breakage, release of mechanical energy (e.g., broken springs), or loosening and/or falling unless the employer can demonstrate that to do so would be inconsistent with the manufacturer's recommendations or would otherwise impair employee safety.

\*\*\*\*\*

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

## **SUMMARY OF AND RESPONSE TO COMMENTS**

## **SUMMARY AND RESPONSE TO WRITTEN AND ORAL COMMENTS**

### **I. Written Comments:**

#### **Mr. David Shiraishi, Area Director, Region IX, OSHA, U.S. Department of Labor, by letter dated August 17, 2015.**

##### **Comment:**

Mr. Shiraishi commented that Federal OSHA has reviewed the proposal and found it to be commensurate with federal standards.

##### **Response:**

The Board thanks Mr. Shiraishi for his comment and participation in Board's rulemaking process.

#### **Ms. Marti Fisher, Legislative Advocate, California Chamber of Commerce, in a comment submitted to the Standards Board at the public hearing dated August 20, 2015.**

##### **Comment:**

Ms. Fisher suggested a revision to the proposal which duplicates the language that Mr. Bland proposed in his oral comments.

##### **Response:**

The Board refers Ms. Fisher to the response to the oral comments from Mr. Kevin Bland.

The Board thanks Ms. Fisher for her comments and participation in Board's rulemaking process.

#### **Mr. Gerald Fulghum, Safety Consultant, by letter dated July 20, 2015.**

##### **Comment:**

Mr. Fulghum wrote that he agreed with the Board's proposal to adopt language to provide for a clear, concise, and correct reading and interpretation of the regulation. However, he stated that an issue he would like the Board to consider is the compound nature of Section 3328(a). He points out that in the first part of the proposal, the employer is to insure that machinery and equipment be "...designed or engineered to safely sustain all anticipated loads..." yet in the second part, machinery and equipment "...shall not be used or operated under conditions of speeds, stresses, or loads which endanger employees." Mr. Fulghum opines that the two separate requirements unnecessarily compound the intent and requirements of the regulation.

Mr. Fulghum proposes that the Board separate these requirements into two self-standing subsections for clarity and proper enforcement.

Response:

The Board accepts the comment and proposes to separate subsection (a) into two separate paragraphs, which will also accommodate the requirements which are proposed to address environmental conditions.

The Board thanks Mr. Fulghum for his comments and participation in Board's rulemaking process.

II. Oral Comments:

Oral comments received at the August 20, 2015, Public Hearing in Sacramento, California.

**Mr. Kevin Bland, representing the California Framing Contractors Association, the Residential Contractors Association and the Western Steel Council.**

Comment:

Mr. Bland stated that the language leaves out the fact that the employer is not always the designer of the equipment. He stated that the safe use of the equipment and using it as designed and recommended by the manufacturer, is the main key. He proposed the following new language:

“All machinery and equipment shall be used or operated in accordance with the manufacturer's recommended speeds, stresses, and load requirements where such recommendations are available.”

He said that this new language keeps employers out of an overload situation and keeps the mode of operation consistent with the manufacturer's specifications. He stated that the new language also enhances safety and the employer's capability of compliance.

Response:

The Board accepts Mr. Bland's comment pertaining to “All” machinery and equipment. The proposal has been further modified to simply require machinery and equipment to be designed to sustain all reasonably anticipated loads in accordance with recognized engineering principles thus replacing the phrase, “where such recommendations are available”. The Board believes this modification eliminates the concern over scenarios where the manufacturer's recommendations are not available.

The Board thanks Mr. Bland for his comments and participation in Board's rulemaking process.

**Ms. Laura Stock, Occupational Safety and Health Standards Board Member.**

Comment:

Ms. Stock asked Mr. Bland what could be done if information from the manufacturer for a piece of equipment is not available. Mr. Bland stated that other available information for that piece of equipment could be used if it identifies what the stresses, speed, and load requirements are. Ms.

Stock stated the proposal might benefit from further clarification, and the final language should address and clarify those circumstances.

Response:

To address Board member Stock's concern over the availability of the manufacturer's recommendations, the proposal has been modified to state that the design and engineering of machinery and equipment shall be in accordance with recognized engineering principles which would apply when the manufacturer's recommendations are not available.

**Mr. Bruce Wick, Director of Risk Management, CA Professional Association of Specialty Contractors (CALPASC).**

Comment:

Mr. Wick stated that the language that Mr. Bland proposed works. He stated that when the Division issues a citation that is not sustained, it is appropriate to revisit that regulation and review it. He suggested that it would be ideal to bring all of the involved stakeholders together to discuss the case behind this regulation, and to have all of the information available about the case for them to discuss. He stated that it is important that employers are not discouraged from using equipment because they cannot figure out if it is okay to use that equipment to transport materials. He further stated that equipment should be able to be used to lift, load, and carry materials to protect employees from injury.

Response:

The Board wishes to clarify that the proposal is not intended to discourage employers from using assistive devices to lift and handle loads but that such equipment must be safe for its intended use.

The Board thanks Mr. Wick for his comments and participation in Board's rulemaking process.

**Mr. David Harrison, Occupational Safety and Health Standards Board Member.**

Comment:

Mr. Harrison suggested that labor representatives speak to the individuals who have given testimony today on this issue to ensure that they get the opportunity to weigh in on Mr. Bland's proposed new language.

Response:

Board staff reached out to labor and management during the development of the proposal. There was no response to the proposal by labor. Rulemaking procedures dictate that modifications to the proposal be submitted to those who commented for their further review and comments.

**Dr. Robert Blink, Occupational Safety and Health Standards Board Member.**

Comment:

Dr. Blink suggested adding language to the proposal to address operating machinery and equipment in certain environmental conditions, such as when it is raining, or when the temperature is below freezing or higher than 100 degrees. He recommended the following revision to the proposal:

“Machinery and equipment shall be designed or engineered to safely sustain all anticipated loads and anticipated operating conditions.”

He also recommended adding language to address situations where manufacturer specifications are not available so that some other rational analysis or scientific evidence can be entered into the discussion when manufacturer specifications are not available.

Response:

The Board accepts the suggestion to include environmental conditions which could render the equipment/machinery unsafe to use (contrary to manufacturer’s recommendations). This will ensure that the environment in which machinery and or equipment is operated could not contribute to an accident and place employees at risk of injury. With regard to the issue of unavailable manufacturer’s recommendations, the Board notes the response provided to Ms. Stock with respect to her recommendation to address situations where the manufacturer’s specifications are not available. In the proposed subsection (a)(2) when the manufacturer’s recommendations regarding environmental conditions are not available the employer shall consider the machinery/equipment’s engineered design.