

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**FINAL STATEMENT OF REASONS****CALIFORNIA CODE OF REGULATIONS**

Title 8: Chapter 4, Subchapter 4, Article 29, Section 1710(a)
of the Construction Safety Orders (CSO); and Chapter 4, Subchapter 7, Article 98,
Section 4999 of the General Industry Safety Orders (GISO)

The Securing of Loads Prior to Release from Cranes and Other Hoisting Apparatus

There are no modifications to the information contained in the Initial Statement of Reasons except for the following sufficiently related modifications that are the result of public comments and/or Board staff evaluation.

Construction Safety Orders, Section 1710. Erection of Structures.**Subsection (a) Bracing.**

Section 1710(a) pertains to lateral and progressive bracing of loads, such as trusses and beams, during construction. This subsection requires building structures/members to be braced, connected, and adequately stabilized or anchored to prevent the shifting of structural members. New subsection (a)(4) is proposed to ensure that loads are not released from cranes or other hoisting apparatus (e.g., forklifts or aerial devices equipped with attachments for rigging and/or the lifting of loads) until the load has been secured or supported to prevent any inadvertent movement. Hoisting apparatus, such as rough terrain telescoping-boom forklifts with special attachments, such as a jib (outer end lifting arm of a crane) and certain truck-mounted aerial devices with a variety of lifting attachments are used to move and carry loads on construction sites.

The proposed amendment to add subsection (a)(4) is for worker safety to ensure that loads carried by cranes or other hoisting devices like those discussed above, have secured and supported loads prior to release or detachment to prevent inadvertent toppling causing serious injuries or death to workers. As a result of written comments, a modification is proposed that is necessary to clarify that the person detaching the load must verify that the load has been secured or supported to prevent inadvertent movement.

General Industry Safety Orders, Section 4999. Handling Loads.

Section 4999 is contained in GISO Article 98, "Operating Rules" regarding crane, hoist, and derrick operations. Section 4999 addresses operations, such as attaching loads, moving loads, the holding of loads and safe practices before and during hoisting. However, Section 4999 does not address the securing of loads prior to release or detachment of loads from a crane or other hoisting apparatus. New subsection (g) is proposed to ensure loads are secured or supported before release or detachment and prevent any inadvertent movement of the loads upon release. As a result of written comments, a modification is proposed that is necessary to clarify that the person detaching the load must verify that the load has been secured or supported to prevent inadvertent movement.

SUMMARY AND RESPONSE TO ORAL AND WRITTEN COMMENTS

I. Written Comments

Mr. Bradley D. Closson, Executive Vice President, North American Crane Bureau by letter dated February 15, 2001.

Comment:

Mr. Closson states that the proposed wording for CSO Section 1710(a)(4) and GISO 4999(g) will be an enhancement to the enforcement effort of the Division of Occupational Safety and Health. However, Mr. Closson expressed concern that the proposed wording will place the responsibility for determining when a load has been secured or supported to prevent inadvertent movement upon the crane operator. Mr. Closson notes that in most situations the crane operator has no knowledge of the load's stability or the supporting structure's competence at the time of load placement.

Mr. Closson states that the delineation of responsibilities before an accident in multi-employer workplaces is increasingly important. The expectation of an "omniscient" crane operator at the controls is not realistic and is not an expectation that will lead to a safer work environment.

Mr. Closson believes the wording should clearly indicate that the person detaching the load from the crane should determine when a load has been secured or supported to prevent inadvertent movement. Mr. Closson suggested modification to the proposal by inserting the words, "...until the person detaching the load from the crane has verified that¹ the load has been secured..." With this recommended wording, proposed Section 4999(g) in final would read, "Loads shall not be released or detached from a crane or other hoisting apparatus until the person detaching the load from the crane has verified that the load has been secured or supported to prevent inadvertent movement.

¹ Board staff changed Mr. Closson's proposed modification wording slightly for minor editorial purposes only.

Response:

The Board concurs with Mr. Closson that in many situations (e.g., tower crane operations) the crane operator may not have a clear view of the load. This is a common occurrence where the crane operator's view is reduced or obstructed by equipment/materials or portions of building structures. In situations where the crane operation is not in full view of the crane operator, Section 5001 requires a signal person to direct the crane operator unless the operator has a signal or control device provided for safe movement and operation of the crane.

Board staff also concurs with Mr. Closson that it is the person or persons detaching or securing the load that is best able to make the determination that the load is secured or supported prior to release. Even when the load is in clear view of the crane operator, the operator relies on those detaching or securing the load to advise him or her that the load has been secured or supported. Therefore, Board staff believes that proposed modifications recommended by Mr. Closson have merit. Modifications consistent with Mr. Closson's recommended wording have been added to the proposed regulatory text for CSO Section 1710(a)(4) and GISO 4999(g).

The Board thanks Mr. Closson for his general support of the proposal and for his participation in the Board's rulemaking process.

II. Oral Comments

There were no oral comments at the March 15, 2001 Public Hearing.

DETERMINATION OF MANDATE

These regulations do not impose a mandate on local agencies or school districts as indicated in the Initial Statement of Reasons.

ALTERNATIVES CONSIDERED

The Board invited interested persons to present statements or arguments with respect to alternatives to the proposed regulation. No alternative considered by the Board 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 adopted action.