

**OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD**

BOARD STAFF'S REVIEW OF THE PETITION

Petition File No. 558
Lew Barbe



Submitted By: David Kernazitskas, MSPH, CIH, CSP
Title: Senior Safety Engineer
Date: July 27, 2016

Introduction

On March 8, 2016, the Occupational Safety and Health Standards Board (Board) received a petition from Lew Barbe (Petitioner). The Petitioner requests that the Board amend Title 8, Section 3210(b) to remove Exception 9 regarding the provision of guardrails for work that takes place four or more feet off the ground on mobile vehicles/equipment.

Labor Code Section 142.2 permits interested persons to propose new or revised regulations concerning occupational safety and health and requires the Board to consider such proposals and to render its decision no later than six months following their receipt. In accordance with Board policy, the purpose of this evaluation is to provide the Board with relevant information upon which to base a reasonable decision.

History

The Board voted to adopt Section 3210(b) in its current form in December, 1998, and the regulation became effective in June, 1999. Exception 9 to Subsection 3210(b) resulted from the consensus of an advisory committee meeting held on May 7-8, 1997 and several comments during the ensuing rulemaking process.

Text for Exception 9 was modeled after language used in a Society of Automotive Engineers standard (SAE J185 June 88), which provides specifications for using steps, handholds, or other structural members in place of guardrails where guardrails are impracticable due to the design or function of the mobile equipment.

Reason Given for the Petition

The Petitioner provides limited detail in the request to delete Exception 9 from Section 3210(b). In his brief email sent February 20, 2016, he states only that "Perimeter guarding is feasible and practical on mobile vehicles i.e. tank trucks, etc." He also mentions that he has "asked Tram [a company that manufactures a fall protection device for use on mobile equipment] to send to the [Board] under separate package [their] material..."

In a separate email, dated March 8, 2016, David Crumbaugh, Executive Vice President, Standfast USA/TRAM Fall Protection, provided sales brochures and information on a fall protection system designed for use on tanker trucks and stationary tanks.

Board staff infers that because of technology like the TRAM product, the Petitioner requests the Board amend Section 3210(b) to remove an exception for guardrails and handholds at elevated locations when they can be shown to be impracticable by the design or work process on mobile vehicles or equipment. Staff's attempts to contact the Petitioner via email for clarification of the Petition were not returned.

National Consensus Standard

SAE J185:1988 *Access Systems for Off-Road Machines* sets up criteria for access systems primarily to aid in minimizing accidents and injury to personnel getting on, off, or moving about while servicing or preparing to operate off-road machines. Although the standard does not directly address on-highway vehicles, it appears that several manufacturers reference the standard to design access systems for on-highway vehicles and equipment.

The 1988 edition was updated once in 2003 and revised in 2015, the latest version. The standard provides specifications for ladders, handrails, and handholds installed on off-highway vehicles and equipment.

Federal OSHA Standards

Federal OSHA regulation 29 CFR 1910.23 *Guarding Floor and Wall Openings and Holes* provides general information for protecting employees from falls with guardrails and handrails. Federal OSHA does not directly address fall protection for work from tanker trucks or other mobile equipment.

The Department of Transportation provides guidance similar to that found in SAE J185, regarding specifications for ladders, handrails, and handholds (see 49 CFR 399.207 *Truck and Truck-tractor Access Requirements*).

In 1990, OSHA published a proposed rule (55 FR 13360) to address slip, trip, and fall hazards. The rule contained language which would exempt work on mobile equipment due to feasibility issues. As a result of public comment, the rulemaking effort was suspended without further action.

On May 24, 2010, OSHA published another proposed rule (75 FR 28861) to address slip, trip, and fall hazards. According to the summary of the proposal, existing subpart D (the federal fall protection standard) does not specifically address or exclude fall protection on mobile equipment. The summary explains that OSHA is seeking comment to determine if specific requirements for fall protection on mobile equipment are necessary. "If, in response to this issue, the Agency [OSHA] receives sufficient comments and evidence to warrant additional rulemaking, a separate proposed rule will be issued."¹

OSHA currently enforces fall protection on mobile equipment using the general duty clause, to which California is not required to be commensurate.

¹ Proposed Rule: Walking-Working Surfaces and Personal Protective Equipment (Fall Protection Systems). <https://www.federalregister.gov/articles/2010/05/24/2010-10418/walking-working-surfaces-and-personal-protective-equipment-fall-protection-systems#h-12>.

Division of Occupational Safety and Health (Division) Report

In its evaluation dated June 10, 2016, the Division recommends that the petition be granted “to remove [E]xception 9 from subsection (b)” with the intent that doing so will require employers to provide alternative fall protection methods where guardrails are not feasible.

Staff Evaluation

Providing fall protection on mobile equipment poses several challenges to employers, primarily because the equipment is not used consistently in one location. As a result, prescriptive standards on protecting employees from falling while working on all mobile vehicles or equipment are not readily available.

Section 3210(b) “Other Elevated Locations” requires guardrails for all employees exposed to a fall of four feet or more from elevated locations that are not buildings or structures. An exception for mobile vehicles and equipment is necessary because the configuration and use of such equipment can make guardrails impracticable in many cases.

Additionally, the work performed on top of the equipment is typically of short duration to perform a brief inspection or secure a load. Examples of mobile equipment include earth moving, mining, and construction equipment, mobile cranes, airplanes, car carriers, tanker trucks, and tractor trailers.

Because any two elevated locations on mobile vehicles or equipment can differ so greatly, employers are only required generally via Section 3203 *Injury and Illness Prevention Program* to protect employees working at heights. The performance-based standard does not specify an exact means an employer must use to prevent injury to employees working on top of the equipment, but it does require employers to identify and control such hazards.

A reading of the rulemaking file indicates the Board intended to exclude mobile equipment from the requirements of Section 3210(b) in its 1997-1998 rulemaking effort. The Division evaluation incorrectly states that subsection (c) was written to require fall protection on mobile equipment where guardrails or handholds are impracticable.

In fact, the advisory committee discussed the issue at length. Stakeholders insisted that mobile equipment be excluded from the requirements of subsection (b). The committee chair suggested that subsection (c) “allows for alternate means of protecting employees where guardrails are impracticable, due to machinery requirements or work processes,” in the airline industry, but the committee could not reach a consensus on the matter. Exception 8 to Section 3210(b) applies to the airline industry and excepts employees “Working on or in aircraft wheel wells when the wheel well design does not permit the use of guardrails or other fall protection equipment/devices.”

The minutes of the advisory meetings do not outline a clear intent to require fall protection or guardrails on mobile equipment. They do, however, state that Exception 9 was proposed “to permit the use of sufficient steps and handholds to be used on mobile vehicles/equipment where [guardrails are impracticable].”

Subsection (c) applies to elevated locations in subsection (a) and (b) where guardrails are impracticable. Because Exception 9 exempts “mobile vehicles/equipment, where the design or work processes make guardrails impracticable,” neither subsection (a), (b), nor (c) applies to the equipment excepted by Exception 9. The Division evaluation rightly points this out in Section 7.0 of its report, citing a Denial of Petition for Reconsideration for *A.L. Gilbert Company, Cal-OSHA App. 08-1646-1647* (Sept 30, 2010).

The Appeals Board again supported the Board’s intent to exclude mobile vehicles and equipment from the requirements for guardrails or other fall protection in *Estenson Logistics, LLC., Cal-OSHA App. 05-1755, Decision After Reconsideration* (December 29, 2011). As pointed out in the Division evaluation, the Appeals Board concluded that Section 3210(c) is superseded by Section 3210(b) Exception 9 for employees working on mobile vehicles or equipment.

As stated in the review of Federal OSHA Standards above, OSHA does not have specific standards for enforcing fall protection on mobile equipment, and instead relies upon the General Duty Clause for enforcement. A federal enforcement memorandum regarding the applicability of 29 CFR 1910.132 “Personal Protective Equipment” to require fall protection on mobile equipment states:

[I]t would not be appropriate to use the personal protection equipment standard, 29 CFR 1910.132(d), to cite exposure to fall hazards from the tops of rolling stock, unless employees are working atop stock that is positioned inside of or contiguous to a building or other structure where the installation of fall protection is feasible.

Although specific fall protection measures on mobile equipment are not required by federal or California regulations, some options exist for protecting employees working at four or more feet from the ground on such equipment. Each option has benefits and limitations and many apply only to a specific type of vehicle or mobile equipment, including the product identified by the Petitioner.

Because of the numerous different types of mobile equipment in the state, however, solutions do not exist that can be feasibly applied in all situations. Deleting Exception 9 for all vehicles and mobile equipment could have unintended consequences, impact California industry, and be contrary to the consensus of the advisory committee.

Due to the extensive costs to many employers and the unavailability of feasible options to others, mandating all employers to provide guardrails or equivalent fall protection to employees on mobile equipment would result in a significant cost impact without a basis for necessity, such as a history of accident or injury data.

Recommendation

Consistent with the foregoing discussion, Board staff believes the Petitioners' request should be granted to the limited extent that the Board direct staff to further investigate accident data related to employees falling off mobile vehicles and equipment where practicable fall protection measures were available, but were not used. If staff discovers a significant incidence of injuries or fatalities from such work, staff will convene an advisory committee of stakeholders to discuss amendments to Section 3210(b) or Exception 9.