

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
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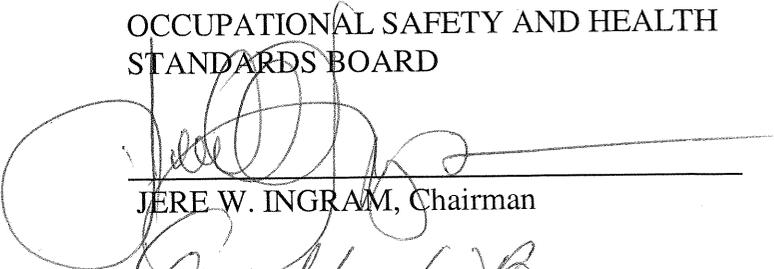
In the Matter of a Petition by:)
)
) PETITION FILE NO. 429
David A. Caldwell,)
5849 Soltero Drive)
San Jose, CA 95123)
)
)
)

Applicant.)

PETITION FILE NO. 429
DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached
PROPOSED DECISION.

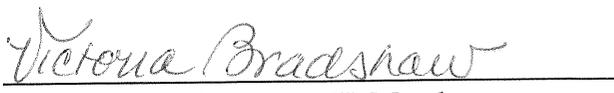
OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD



JERE W. INGRAM, Chairman

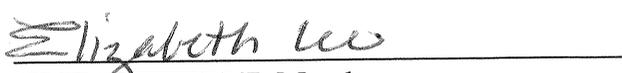


GWENDOLYN W. BERMAN, Member

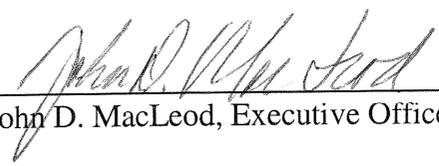


VICTORIA BRADSHAW, Member

WILLIAM JACKSON, Member



ELIZABETH LEE, Member

By: 

John D. MacLeod, Executive Officer

DATE: July 19, 2001

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**PROPOSED PETITION DECISION OF THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
(PETITION FILE NO. 429)**

INTRODUCTION

The Occupational Safety and Health Standards Board (Board) received a petition on February 20, 2001 from David A. Caldwell (Petitioner). The Petitioner requests the Board to amend Title 8, California Code of Regulations, Sections 3336, 3650, and 3664 with respect to Rollover Protective Structures (ROPS) for sit-down forklift operators engaged in loading dock operations.

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 render a decision no later than six months following receipt. Further, as required by Labor Code Section 147, any proposed occupational safety or health standard received by the Board from a source other than the Division must be referred to the Division for evaluation, and the Division has 60 days after receipt to submit a report on the proposal.

SUMMARY

The Petitioner proposes regulations be adopted to include requirements for forklift trucks used for dock loading and unloading operations. The Petitioner believes that forklifts should be equipped with ROPS adequate for the conditions in which the equipment is being used and that meet the requirements of ASME/ANSI or SAE standards or that are certified by an engineer or the manufacturer that they provide equivalent or better protection. Due to the dynamic forces that act upon a ROPS during a rollover, it is imperative that a ROPS be properly designed, manufactured, and installed. Proper materials and mounting hardware, as well as engineering design, are necessary to ensure safe performance in all temperatures and operating conditions.

The Petitioner states that a ROPS is a structure built above or into the cab of a vehicle. Its purpose is to resist the dynamic impact and support the weight of the vehicle to protect the operator from being crushed should the vehicle roll upside down. Rollover protective structures, which include roll bar, frame, and roll protective cab designs, are considered by experts to be the single most effective way to reduce the number of rollover fatalities. Based on the Petitioner's research, operators who remain within the confines of a truck equipped with ROPS are rarely seriously injured.

In the event of an overturn, ROPS provide a "zone of protection" for the operator. However, if the operator is thrown off the forklift the operator may not be protected by the ROPS. The operator is only protected from injury if they remain securely in the zone of protection.

Therefore, regulations should state that seatbelts must be used when a ROPS equipped forklift is being moved.

The Petitioner also requests that amendments be made requiring that vehicles being loaded/unloaded by powered industrial trucks at a dock shall have the brakes set and both rear wheels chocked or vehicle restraints used that are effective in preventing creep, pullout, or other movement resulting in separation of the vehicle from the dock before loading/unloading operations are completed. Only wheel chocks certified by manufacturers as able to prevent rolling of an eighteen-wheeler trailer or truck wheel may be used. The keys must be removed from the vehicle and given to loading dock personnel if there is not a signaling system or signaler to alert the truck driver that loading/unloading operations have ceased.

The Petitioner's final proposal is to require the use of a signaler when the forklift operator is carrying a load that blocks the operator's view and the operator is unable to tell whether a truck or trailer has departed or pulled out from the loading dock.

DIVISION'S EVALUATION

The Division's evaluation report dated April 17, 2001 states that the Division shares some of the Petitioner's concerns about the effectiveness of the lift truck operating rules and agrees with his suggestion that certain changes are in order.

The Division does not support the Petitioner's suggestion to add ROPS coverage to industrial trucks and tow tractors intended for use in warehouses, loading docks, and paved yards or tarmac areas. A review by the Division of the applicable ANSI/ASME standards does not indicate that the use of ROPS is considered necessary by these standards developing bodies. Additionally, national and California state accident data for industrial truck operations do not demonstrate a need for ROPS beyond that afforded by current design practice. The available accident data do not show that operators are being injured due to structural collapse of the overhead guard support system or absence of ROPS.

However, the Division agrees that there is justification based on injury and fatality data to revisit the need to require the use of operator restraint methods. The Federal OSHA IMIS database for forklift fatalities found that in California in the past ten years there have been at least 100 fatal accidents involving forklifts. Further review of these accidents revealed that 22 percent of the fatalities resulted from the operators being crushed by the overhead guard, its support structure, or other part of the truck when the operator was ejected or jumped from the seat. Restraints are needed to prevent ejection and subsequent crushing or amputation injuries to operators caught between the overhead guard or other part of the truck and the floor, ground, or adjacent structure/contact surface.

The Division found that Section 3336, as it is presently written, establishes a broad performance requirement stating only that trucks or trailers shall be secured from movement during dock loading and unloading operations. Related regulations found in Section 3664(a)(22) and (23) and

29 CFR 1910.178(k) are specific in detailing requirements for preventing unintended movement of trucks, trailers, and railcars when boarded by industrial trucks or tractors. These related regulations explicitly state that trucks, trailers and railcars must have the brakes set and be restrained or have the wheels blocked to prevent movement when boarded by industrial trucks or tractors. The Division suggested changes to make loading dock operations at least as effective as all other operations covered by those related regulations.

The Division states that Section 3650 contains a variety of specifications of general application to operations of industrial trucks and industrial tow tractors. The Division recommends that this section be amended to incorporate and make effective the 32 operating rules for industrial trucks and industrial tow tractors presently contained in subsection 3664(a) of the GISO.

The Division notes that enforcement of subsection 3664(a) has been limited by decisions of the Cal/OSHA Appeals Board. The Appeals Board has frequently said that subsection 3664(a) requires that employers post and enforce a set of safe operating rules for industrial trucks and tow tractors. As it is currently written it is impractical to apply the 32 operating rules set forth in this section as performance and specification standards with regulatory effect. The Division recommends that the various operating rules should be relocated to Section 3650 and set forth as effective and enforceable regulatory requirements.

The Division believes that adoption of the proposed changes will improve the effectiveness, clarity of Title 8 regulations, and conformance with the corresponding Federal OSHA regulations.

STAFF'S EVALUATION

Board staff recognize that the Petitioner's concerns about the frequency of forklift accidents and severity of the injuries are well founded and support improving workplace safety where forklifts are operated.

The Petitioner's recommendation to require rollover protection for forklifts at loading dock operations does not address the primary hazard of operator entrapment under the load or forklift. Data show that tipping over of forklifts is a common hazard in forklift operations and that these accidents are generally caused by operator error. Data also show that the forklift, when tipping over, is prevented from completely rolling over by both the forklift mast and the overhead guard when present. Because of this finding, Board staff does not support the recommendation to require ROPS on forklifts.

The Petitioner's recommendation to require an operator restraint system does have merit since many of the injuries and fatalities resulting from forklift accidents are caused by the operator being crushed by the load or forklift after being ejected from the seat. Board staff recommend this portion of the petition be granted to the extent that an advisory committee is convened to consider amending Title 8 to address the use of operator restraint systems.

The Petitioner's recommendation to amend Section 3336 of the GISO by adding a requirement for effective blocking or restraining of vehicles at loading docks is already addressed in the operating rules for forklifts in Section 3664(a)(22), which states:

“Vehicles shall not be driven in and out of highway trucks and trailers at loading docks until such trucks or trailers are securely blocked or restrained and the brakes set.”

The intent of Section 3664(a)(22) is to prevent the inadvertent movement of the trucks and trailers away from the loading dock and allows the use of physical restraint systems for the vehicles. Board staff do not support the Petitioner's recommendation to amend Section 3336 of the GISO and feel this issue is adequately addressed in Section 3664(a). Therefore, Board staff recommend that this portion of the petition request be denied.

Board staff recognize that the Division's ability to individually enforce the forklift operating rules will lead to greater compliance with the operating rules and improved work site safety. Therefore, Board staff support the recommendation by the Division to move the requirements of Section 3664(a)(1) through 3664(a)(32) into Section 3650 thereby giving the requirements, including the requirement for effective blocking and restraining of trucks and trailers at loading docks, regulatory force. This recommendation to amend Sections 3650 and 3664 is already included in a proposed rulemaking that will be developed by Board staff as part of the 2001 rulemaking calendar and heard by the Board at a future Public Hearing.

The Petitioner's recommendation to add a requirement for the use of signalers when the forklift operator's view is blocked during the loading dock operations also has merit. Board staff believe that there is an inherent danger of forklifts running into persons or objects during the forklift loading and unloading phase, when the objects that are being loaded or unloaded block the view of the operator. Because this hazard is not addressed in the current standard, Board staff recommend including the requirement to use signalers in the operating rules currently listed in Section 3664. Therefore, Board staff recommend granting this portion of the petition to the extent that this issue be considered by an advisory committee.

CONCLUSION AND ORDER

The Occupational Safety and Health Standards Board has considered the petition of Mr. David A. Caldwell, to make recommended changes to Title 8, California Code of Regulations, Sections 3336, 3650, and 3664 with respect to Rollover Protective Structures (ROPS), operator restraint systems, vehicle restraint systems, and the use of a signaler when the forklift operator's view is blocked, for sit-down forklift operators engaged in loading dock operations. The Board has also considered the recommendations of the Division and Board staff.

For reasons stated in the preceding discussion, the following elements of the petition are GRANTED to the extent that Board staff is requested to convene an advisory committee:

- Requiring the use of an operator restraint system when a ROPS equipped forklift is being moved.
- Requiring the use of a signaler when the forklift operator is carrying a load that blocks the operator's view and the operator is unable to tell whether a truck or trailer has departed or pulled out from the loading dock.

The Petitioner, or authorized representatives, shall be extended an invitation to participate in the advisory committee deliberations.