

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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Attachment No. 2

INITIAL STATEMENT OF REASONS**CALIFORNIA CODE OF REGULATIONS**

Title 8: Division 1, Chapter 4, Subchapter 7, Article 20, Section 3563 and
Article 25, Section 3651 of the General Industry Safety Orders.

Rollover Protective Structures for Ride-On Power Lawn Mowers**SUMMARY**

The proposed amendments for this rulemaking action were initiated in large part from recommendations submitted to the Board in the matter of Petition File No. 494 submitted by Julio and Madeline Petrini. The Petitioners' son was fatally injured when the riding lawn mower¹ he was operating went over a landscaping retaining wall and overturned on him. The lawn mower he was operating was not equipped with a rollover protective structure (ROPS).

Title 8 standards pertaining to power lawn mowers are located in the General Industry Safety Orders (GISO) Section 3563. The existing standard does not address the use of ROPS in combination with seat belts for riding lawn mowers. Therefore, the petition recommended that the Board consider a rulemaking action that would address ROPS and seat belt requirements for the operators of riding power lawn mowers. At the direction of the Board, an advisory committee of stakeholders was convened and the proposal was developed.

A review of the accidents and injuries associated with riding lawn mowers in the federal OSHA data base indicates a number of serious injuries and sometimes fatal accidents related to workers being crushed by lawn mowers overturning on them or being drowned when mowers overturned in water, pinning the operator. California has fared better than some other states with a history of only several occupational fatalities. The Bureau of Labor Statistics Information for the year 2007 indicated that nationally, there were 21 fatal accidents on riding lawn mowers. In 2006, there were at least 290 non-fatal, nationwide reported accidents involving riding lawn mowers.

Federal OSHA accident data included similar circumstances involved in accident injuries, including operating the riding lawn mowers on slopes that exceeded the manufacturer's specifications or operation of riding mowers on wet and slippery surfaces encountering an obstruction such as a tree stump, a ditch, or a body of water. The water in some of the incidents was not very deep, less than two feet in some cases, but the operator was pinned under the

¹ When the term "riding lawn mower" is used in this document, it means the same as a "ride-on, sit-down lawn mower."

mower with no one to provide assistance. In some accidents, the mower was equipped with ROPS and/or seatbelts, but the ROPS were not in use having been folded down in the disengaged position.

A primary purpose of this rulemaking action is to address requirements for ROPS and seatbelt use during operation of ride-on, sit-down, power lawn mowers. However, the proposal also seeks to replace outdated language and include provisions that ensure power lawn mowers meet applicable ANSI consensus standards. The proposal also limits the use of ride-on, sit-down mowers in areas and situations that have been found to be unsafe and hazardous for the operator. The proposal also includes training requirements for the operators of power lawn mowers.

SPECIFIC PURPOSE AND FACTUAL BASIS OF PROPOSED ACTION

Section 3563, Power Lawn Mowers.

Existing Section 3563 includes the general requirements for power lawn mowers.

Subsection (a) Scope.

The existing scope, subsection (a) states that these regulations apply to power lawn mowers of 20-brake horsepower or less and addresses provisions for walk-behind and riding mowers including lawn riding tractors and lawn and garden riding tractors and related mowing attachments. Certain types of grass/turf cutting machines such as sulky-type units, flail mowers and sickle bar mowers often associated with agricultural operations are excluded. An informational “Note” refers to Article 25 (which includes provisions for agricultural/industrial tractors) when tractors of more than 20-brake horsepower are used.

An amendment deletes the reference to “20-brake horsepower” which essentially can also be referred to as “20 engine horsepower.” The provisions in Section 3563 go back to at least 1978 when 20 engine horsepower likely was an accurate way to determine a machine intended primarily for mowing lawns versus agricultural/industrial operations. Agricultural and industrial tractors are typically utility tractors designed for use with multiple implements and attachments for agricultural or industrial work. However, today many zero turn lawn mowers² and lawn riding tractors designed primarily for mowing are well over 20 engine horsepower and often can range up to 30 engine horsepower. Consequently, the references to “20-brake horsepower” including the “Note” for subsection (a) are deleted because they are obsolete indicators of the type and design of machines that are currently used as ride-on, sit-down power lawn mowers.

Agricultural and industrial tractors are designed as utility machines for multiple uses with a variety of implements and attachments. They are not designed primarily for mowing lawns but in some cases can be equipped with turf mowing implements that cut grassy areas. These types

² A zero turn mower is a machine designed for mowing lawn with a ride-on operator and can be turned in a full circle in a stationary spot because of the design of the wheels and drive mechanism.

of tractors are frequently used along freeways and highways for cutting grassy, turf areas. These utility tractors are covered by provisions in GISO Article 25 which address ROPS and seatbelt use for tractors.

Some lawn mower manufacturers also produce a wide variety of lawn and garden riding tractors that are usually smaller in size, weight and power than agricultural tractors but differ from agricultural tractors in that they are designed primarily and with the specific intent of mowing lawns. Most models of lawn and garden riding tractors designed for lawn care and maintenance are equipped with an under belly mowing deck, although a limited number of models such as the John Deere Lawn Mower, Model 1445 have a power drive that allows the use of reel or rotary bladed front-mounted mowing decks. An amendment is proposed for subsection (a) that clarifies lawn riding tractors and lawn and garden riding tractors “with mowing attachments” are included in the scope section.

In order to ensure that machines designed primarily for mowing lawns are covered by the appropriate provisions in Section 3563 and that agricultural/industrial tractors are covered in Article 25, an amendment is made to subsection (a) that excludes tractors from the provisions of Section 3563 unless the tractor is designed primarily for mowing lawns and is manufactured in conformance with national consensus standards for power lawn mowers.

The proposed amendments for subsection (a) are necessary to remove outdated and obsolete language and provide clarity to provisions in the scope section of the standard.

Subsection (b)(1)

Existing subsection (b)(1) provides that mowers placed in service after March 29, 1975 through April 15, 1999, shall be designed, constructed, tested and labeled to meet the provisions of ANSI B71.1-1972 and B71.1a-1974 or ANSI B71.1-1980, Safety Specifications for Power Lawn Mowers, Lawn and Garden Tractors and Lawn Tractors. Amendments are proposed having the effect of providing consistency with the proposed provisions in subsection (b)(2) and would require that lawn mowers “meet the requirements” of the aforementioned ANSI B71.1 standards.

An additional amendment permits that power lawn mowers can meet the requirements of the applicable ANSI B71.1 or B71.4 standard in effect at the time the mower was manufactured for the time frame specified in subsection (b)(1). The amendment is for clarity and permits the mower to meet the appropriate provisions of a later edition of the ANSI B71.1 or B71.4 standard published during the time period specified in the subsection (i.e. through April 15, 1999).

Subsection (b)(2)

Existing subsection (b)(2) states that power mowers placed in service after April 15, 1999 shall be “approved” as defined in Section 3206 of the GISO. An amendment is proposed that deletes language allowing mowers to be “approved” in lieu of language for this subsection that would

require mowers to meet the requirements of the specific ANSI/OPEI³ power lawn mower standards published after April 15, 1999, which are incorporated by reference. The term “approved” as defined in GISO Section 3206 has broad application, however, it does not provide specific safety information and guidance for the design, guarding, controls and safety features necessary for safe mowing operations. Therefore, an amendment is necessary to ensure that power lawn mowers meet the provisions of the applicable consensus standard for the mower design type and date of manufacture.

Subsection (b)(3)

A new proposed subsection (b)(3) would require power lawn mowers manufactured after the effective date of the regulation to have a durable label stating that the power lawn mower is manufactured in accordance with the applicable ANSI B71.1 or B71.4 standard. The ANSI B71 standards already require a durable label on power lawn mowers that provides the name of the manufacturer or supplier; model number or serial number, or both; and the name and address of a source for replacement parts.

The advisory committee including manufacturer representatives agreed that adding a statement of compliance with the applicable ANSI B71.1 or B71.4 standard would assist both the employer and the Division in determining that the mower is in compliance with the provisions of subsection (b)(2). It should be noted that stakeholders determined that the ANSI compliant labeling provision should be omitted for existing mowers as to retroactively label mowers currently in use would be very onerous and difficult to achieve with effective results.

Subsection (c) Roll-Over Protective Structures (ROPS) and Seat Belts.

New proposed subsection (c) would require that when visual inspection or technical information from the manufacturer indicates that a riding lawn mower is designed by the manufacturer to be equipped with ROPS, or to accept ROPS as an option, ROPS engineered and approved for the mower shall be provided and used. The amendment further requires that approved seat belt assemblies shall be provided and used on all riding lawn mowers where ROPS are installed. An exception is proposed stating that ROPS and seat belts may be temporarily suspended only when operating in areas where the vertical clearance is insufficient to allow a ROPS equipped mower to operate.

The proposed amendment is necessary so that operators will be afforded the safety provided by ROPS and seatbelts when riding mowers have been designed by the manufacturer for use with ROPS and seatbelts. The proposed exception is necessary to permit the riding mower to be operated in areas with limited vertical clearance.

³ OPEI means “The Outdoor Power and Equipment Institute”

A “Note” is proposed for this subsection providing a reminder that the requirements for ROPS on agricultural and industrial tractors are provided in Article 25 of the General Industry Safety Orders.

Subsection (d) Prohibited use of ride-on, sit-down lawn mowers.

Proposed subsection (d)(1) would require that ride-on, sit-down mowers be used on slopes in accordance with the manufacturer’s recommendations. When the manufacturer’s recommendations are not obtainable or do not address using such mowers on slopes, subsection (d)(2) would require ride-on, sit-down mowers to be used on slopes consistent with angle limitations typically specified by mower manufacturers. Operating riding mowers on steep slopes is a frequent cause of serious accidents. The proposed amendments are necessary so that the hazards posed by slopes are minimized.

Subsection (d)(3) is necessary to prohibit the use of ride-on, sit-down mowers within 5 feet of the hazards outlined in subsection (d)(3)(A) & (B). These hazards to mower operators were identified in committee discussions and included review of power lawn mower owner’s manuals and accident causes. Maintaining a 5 foot distance from known hazardous areas would allow the use of 48 inch, 36 inch, or 21 inch deck walk-behind mowers to complete work near hazardous conditions.

Subsection (e) Power Operator Lawn Mower Training.

Proposed subsection (e) outlines the training requirements for the operators of power lawn mowers that are included in the scope of Section 3563. It was the consensus of the advisory committee to include specific training requirements for operators given that ROPS will not eliminate all serious accidents and that not all riding lawn mowers are designed for ROPS systems.

Proposed subsections (e)(1) and (e)(2) address issues such as safety training and would require that power lawn mower operators are trained by qualified persons. Further, subsection (e)(2)(C) would in part require instruction and demonstrations by the trainer and practical exercises to be performed by the trainee. Proposed subsection (e) is necessary to provide specific training provisions that have been successful with other equipment such as the use of powered industrial trucks (forklifts).

Subsection (e)(3) Training program content.

Proposed subsection (e)(3)(A) through (G) are necessary to provide uniform training program content and provisions such as, but not limited to, the review of the operator’s manual, safety devices, controls, the use of ROPS, seatbelts and hazardous conditions that could affect the stability of a mower.

Subsection (e)(4) Refresher training and evaluation.

Proposed subsection (e)(4) is necessary to provide requirements that would trigger operator refresher training including when the operator receives a new job assignment that includes operating a mower or machinery that the operator is unfamiliar with or includes mowing lawns on terrain or surfaces that present hazards unfamiliar to the operator in his/her current or past work assignments.

Subsection (e)(5) Avoidance of duplicative training.

Subsection (e)(5) is necessary to avoid duplicative training when an employee has received training previously and is found to be competent to safely operate the type of mower that he or she will be authorized to use.

Subsection (e)(6) Recordkeeping.

Proposed subsection (e)(6) is necessary for instruction and training documentation in a accordance with the general record keeping provisions in GISO Section 3203, Injury and Illness Prevention Program.

Section 3651. Agricultural and Industrial Tractors.

Section 3651(a) addresses ROPS protection requirements for all agricultural and industrial tractors manufactured after October, 25, 1976. An information "Note" is proposed for subsection (a) which is necessary for clarity to indicate that tractors that are designed and used for the purpose of mowing lawns and that meet power lawn mower national consensus standards are covered in Section 3563 "Power Lawn Mowers."

DOCUMENTS RELIED UPON

1. The Petition letter to the Occupational Safety and Health Standards Board dated May 1, 2007 from Julio and Madeline Petrini.
2. The Board's Petition Decision for Petition File No. 494 dated September 20, 2007, in the matter of Petition by Julio and Madeline Petrini.
3. American National Standards Institute/Outdoor Power Equipment Institute (ANSI/OPEI) B71.1-1998 standard for Consumer Turf Care Equipment-Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications.
4. ANSI B71.1-2003 standard for Consumer Turf Care Equipment-Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications.
5. ANSI/OPEI B71.4-1999 standard for Commercial Turf Care Equipment-Safety Specifications.

6. ANSI B71.4-2004 standard for Commercial Turf Care Equipment-Safety Specifications.
7. U.S. Department of Labor, “OSHA IntraNet” Accident Search Results, pages 1-5; and separate attachment pages 1-17, dated October 25, 2008, with emphasis on 35 check-marked accident summaries on pages 1-17.
8. U.S. Bureau of Labor Statistics, Table A-4 “Fatal occupational injuries by primary and secondary source of injury for all fatalities and by major private industry sector, All United States, 2007”- page 2 of 16, denoting 21 riding lawn mower fatal accidents.

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.

DOCUMENTS INCORPORATED BY REFERENCE

1. American National Standards Institute/Outdoor Power Equipment Institute (ANSI/OPEI) B71.1-1998 standard for Consumer Turf Care Equipment-Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications.
2. ANSI B71.1-2003 standard for Consumer Turf Care Equipment-Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications.
3. ANSI/OPEI B71.4-1999 standard for Commercial Turf Care Equipment-Safety Specifications.
4. ANSI B71.4-2004 standard for Commercial Turf Care Equipment-Safety Specifications.

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. The proposal was developed with the assistance of an advisory committee of stakeholders that reached consensus on the provisions contained in these proposed standards.

SPECIFIC TECHNOLOGY OR EQUIPMENT

The provisions in proposed Section 3563(c) would require the use of roll-over protective structures (ROPS) in combination with seat belts for riding lawn mowers designed by the manufacturer to be equipped with such safety equipment. A number of major lawn mower manufacturers selling mowers in California are equipping commercial riding mowers with ROPS

and seatbelts as standard equipment. Some riding lawnmower models are not designed to accept ROPS systems by the manufacturer. In these cases, the proposal would not require retrofitting the mower for ROPS systems. However, riding lawn mower models sold without ROPS that were designed by the manufacturer to accept ROPS as an optional safety related accessory would be subject to the ROPS provisions of the proposal.

The proposal would allow employers 180 calendar days to inventory their equipment and meet the ROPS related provisions. A number of employers and agencies, both public and private, would already be in compliance or near compliance with the proposal. Furthermore, one major manufacturer is offering a free program and another manufacturer a reduced price program to equip certain commercial riding lawn mowers with ROPS and seatbelts when the mower is designed to accept such safety equipment. It is not known at this time if other manufacturers will offer similar programs but it is likely that additional cost reducing/discount programs would be offered that would reduce the average estimated costs for ROPS when required.

COST ESTIMATES OF PROPOSED ACTION

Costs or Savings to State Agencies

There are a limited number of state agencies that own and operate riding power lawn mowers. These agencies would be minimally impacted to the extent outlined in the cost analysis. The Department of Parks and Recreation (DPR) likely owns the most number of riding lawn mowers at 60 statewide. It is estimated for DPR that between 10 and 20 mowers would need consideration for updating to the ROPS provisions in the proposal. The average cost to update a mower for ROPS is approximately \$425.00.

The Department of General Services (DGS) indicates it owns approximately 15-20 riding mowers statewide and that no more than half of those would need consideration for a ROPS system. It should be noted from a review of the OSHA accident summary document outlined in item No. 5, under the heading "Documents Relied Upon" that riding lawn mower accidents are often serious and frequently fatal. Eliminating just one accident would likely far outweigh any one-time cost for any employer/agency to update applicable mowers that are designed for ROPS systems.

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.

Cost Impact on Private Persons or Businesses

The Board is not aware of any cost impacts that a representative private person would necessarily incur related to the proposed action. The primary business with the potential to incur costs would be landscape contractors providing lawn care services. A number of contractors are already in compliance or near compliance with the proposal's ROPS related provisions. Landscape contractors attended the advisory committee that reached consensus for the provisions in this proposal and the California Landscape Contractors Association provided assistance with the potential cost analysis for this rulemaking. The typical or average one-time cost expected for those landscape contractors affected are not expected to be onerous or burdensome. For example, the average small landscape contractor affected by the proposal would have 4 riding mowers of which 2 may need a ROPS system, for an estimated average one-time cost of \$425.00 per mower.

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

The proposal imposes nondiscretionary costs on local agencies; however, only agencies owning riding lawn mowers within the scope of the proposed regulations would be affected. A number of agencies would already be in compliance or near compliance with the proposal. Additionally, some agencies contract a portion or all of their landscape and lawn care services to private contractors. Of those agencies affected, the costs are not expected to be onerous or burdensome. This is because the average agency affected by the proposal has a significant percentage of riding mowers typically in compliance and the average cost to update a mower with ROPS when necessary is nominal.

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.)

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

These proposed standards do not impose unique requirements on local governments. All state, local and private employers 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, primarily lawn care/landscape businesses. The smallest lawn care contractors are often maintaining residential/home lawns that do not require the use of riding lawnmowers and consequently, these contractors would not be affected by the proposal. For other small contractors affected by the proposal, the costs are not expected to be onerous or burdensome as outlined under the heading “Cost Impact on Private Persons or Businesses.”

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.