

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

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**PROPOSED PETITION DECISION OF THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
(PETITION FILE NO. 614)****I. INTRODUCTION**

On April 17, 2026, the Occupational Safety and Health Standards Board (Board of OSHSB) received a petition from Dan Mustico of Outdoor Power Equipment Institute, Inc. (OPEI or Petitioner), to amend title 8, section 3563 Power Lawn Mowers, to revise and update references to various American National Standards Institute (ANSI) B71 and the Outdoor Power Equipment Institute standards that identify safety specifications for powered equipment used in turf care and maintenance. The Petitioner also requests the regulations be amended to add new ANSI/OPEI and Underwriters Laboratories (UL) consensus standards.

II. SUMMARY

The Petitioner requests the Board to amend title 8, subsections 3563(a), (b), and (c).

With respect to subsection 3563(a) the Petitioner suggests adding “applicable standards in clause (b) below” and move the reference to ANSI B71.1 or B71.4 to subsection 3563(b)(2).

The Petitioner’s request would amend the scope to read as follows¹:

Section 3563(a)

[...] These regulations do not apply to [...] tractors as defined in Article 25 of these Orders unless the tractor is designed primarily for mowing lawns and manufactured in conformance with the applicable standards in clause (b) below.

Additionally, the Petitioner requests amending all references to these ANSI consensus standards to be ANSI/OPEI where applicable and add new ANSI/OPEI and Underwriters Laboratories (UL) consensus standards. These amendments would apply to subsection 3563(b)(2).

¹ Underlined text indicates proposed new text while strikethrough of text signifies proposed text deletion.

The Petitioner's proposal in part:

Section 3563(b)(2)

Power lawn mowers manufactured after April 15, 1999, shall meet the requirements of one of the following ANSI/OPEI B71.1 or B71.4 standards, or ANSI/OPEI 5395-2, 5395-3, or UL 62841-4-3, 1447, 2753, as applicable, based on the mower design and date of manufacture. These ~~ANSI~~ standards are hereby incorporated by reference:

ANSI/OPEI B71.1-1998 standard for Consumer Turf Care Equipment-Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications,

ANSI/OPEI B71.1-2003 standard for Consumer Turf Care Equipment-Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications,

ANSI/OPEI B71.1-2012 standard for Consumer Turf Care Equipment Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications,

ANSI/OPEI B71.1-2017 standard for Consumer Turf Care Equipment-Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications,

ANSI/OPEI B71.4-1999 standard for Commercial Turf Care Equipment-Safety Specifications,

ANSI/OPEI B71.4-2004 standard for Commercial Turf Care Equipment-Safety Specifications.

ANSI/OPEI B71.4-2012 standard for Commercial Turf Care Equipment Safety Specifications. ANSI/OPEI B71.4-2017 standard for Commercial Turf Care Equipment-Safety Specifications.

ANSI/OPEI 5395-2-2024 standard for Combustion-Engine-Powered Lawnmowers – Part 2: Pedestrian-Controlled Lawnmowers

ANSI/OPEI 5395-3-2024 standard for Combustion-Engine-Powered Lawnmowers – Part 3: Ride-On Lawnmowers

UL 62841-4-3-2023 standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 4-3: Particular Requirements for Pedestrian Controlled Walk-Behind Lawnmowers

UL 1447-2017 standard for Electric Lawn Mowers UL 2753-2018 Outline of Investigation for Battery Operated Ride-On Lawn Mowers

Lastly, the Petitioner requests removal of subsection 3563(b)(3) because they believe this reference is outdated, provides no safety benefit, and is an undue burden to California's employers.

~~(3) Power lawn mowers manufactured after September 2, 2010, shall be affixed with a durable label stating that the power lawn mower is manufactured in accordance with the applicable ANSI B71.1 or B71.4 standard.~~

III. RELEVANT STANDARDS

A. Federal Standards

Federal OSHA requirements for powered lawn mowers are codified in 29 CFR 1910.243(e). Prior to 2005, 29 CFR 1910.243 required certain powered lawnmowers to meet the requirements of ANSI B71.1-1968.

On Sept. 13, 2005, Federal OSHA², “[revoked] from its portable powered tools standard the provision that certain power lawnmowers designed for sale to the general public meet the American National Standard Safety Specifications for Power Lawnmowers, ANSI B71.1–X1968 (ANSI B71.1–1968).”

Instead, Federal OSHA referenced the general machine guarding standard in 29 CFR 1910.212.

Federal OSHA further explained that:

[...] virtually all of the specific provisions contained in ANSI B71.1–1968 are included in the text of 29 CFR 1910.243(e). [Federal] OSHA considered updating the 1968 ANSI reference to the 1998 version of ANSI B71.1 but determined that doing so would not clarify the standard because the scope of the 1998 version would raise additional issues for compliance that are not encountered under the existing [Federal] OSHA standard.

Since Federal OSHA no longer references B71.1, powered lawn mowers requirements are accessible directly by the employers and end users.

B. California Standards

² Federal Register, Vol 70, No. 176, page [53925](#), (Accessed May 1, 2026)

Section 3563(a) states in the part relevant to Petitioner's request:

[...] These regulations do not apply to [...] tractors as defined in Article 25 of these Orders³ unless the tractor is designed primarily for mowing lawns and manufactured in conformance with the ANSI B71.1 or B71.4 national consensus standards for power lawn mowers.[...]

Section 3563(b)(2) states in part:

Power lawn mowers manufactured after April 15, 1999, shall meet the requirements of one of the following ANSI B71.1 or B71.4 standards, as applicable, based on the mower design and date of manufacture.[...]

Section 3563(b)(3)

Power lawn mowers manufactured after September 2, 2010, shall be affixed with a durable label stating that the power lawn mower is manufactured in accordance with the applicable ANSI B71.1 or B71.4 standard.

C. Consensus Standards

The ANSI/OPEI and UL standards are voluntary consensus standards. Powered lawn mowers are manufactured to meet various national and international consensus standards. IEC 62841-4-3 addresses electric and battery powered lawnmowers. Robotic lawnmowers are covered by IEC 60335-2-107 and will be covered by a future part of IEC 62841. Additional standards are forthcoming. For example, ISO/AWI 18460 *Powered lawn and garden equipment — Internal-combustion engine-powered autonomous lawnmowers* are currently in development.

Powered Lawn Mowers - ANSI/OPEI consensus codes

ANSI/OPEI B71.1 (consumer) and B71.4 (commercial) for decades have served as the consensus codes regarding consumer (residential) and commercial lawn mower standards. In 2024, OPEI replaced B71.1 and B71.4 with ANSI/OPEI 5395 (-1, -2 and -3) to harmonize with international mower standards (ISO 5395). Voluntary compliance by manufacturers of powered lawn mowers with ANSI/OPEI 5395 is expected to begin 2 years after the ANSI publication date.

ANSI/OPEI B71.1/B71.4 Standards vs. ANSI/OPEI 5395 Standards

The ANSI/OPEI B71.1 and B71.4 differ from the later ANSI/OPEI 5395-2024 standards in that the 2024 standard applies to both consumer (residential) and commercial equipment

³ Section 3649 defines "Industrial Tractor" as "A wheel or track-type vehicle of more than 20 engine horsepower used in operations such as landscaping, construction services, loading, digging, grounds keeping, and highway maintenance." Additionally, "Agricultural Tractor" is defined as "A wheel type vehicle, or track vehicle, of more than 20 engine horsepower, designed to furnish the power to pull, carry, propel, or drive implements that are designed for agriculture. All self-propelled implements are excluded."

whereas ANSI/OPEI B71.1 (consumer) and ANSI/OPEI B71.4 (commercial) treated these separately.

ANSI/OPEI 5395 and its two companion standards provide requirements separately as Part 1, terminology and common tests; Part 2, pedestrian-controlled lawnmowers; and Part 3, ride-on lawnmowers, whereas ANSI/OPEI B71.1 and B71.4 cover these requirements together. The ANSI/OPEI 5395-2024 standards are also harmonized with international ISO standards. As such, the testing requirements for lawnmowers conform to ISO testing procedures. Additionally, electrically powered and battery-powered lawnmowers are excluded from the scope of ANSI/OPEI 5395-2-2024 and ANSI/OPEI 5395-3-2024, whereas such equipment is included in the ANSI/OPEI B71.1 and B71.4 standards.

Electric and Battery Powered Lawn Mowers - UL 2753-1 and UL 1447.4

Unlike B71.1 and B71.4, ANSI/OPEI 5395 requirements do not extend to electric or battery powered lawn mowers. Voluntary consensus standards for electric or battery powered lawn mowers, UL 2753-1 and UL 1447.4 both require conformance with ANSI B71.1. Board staff is not aware of any efforts to update the requirements of UL 2753-1 and UL 1447.4 to reference the newer ANSI/OPEI 5395 instead of B71.1.

UL 62841-4-3: Particular Requirements For Pedestrian Controlled Walk-Behind Lawnmowers

UL 62841-4-3 applies to the design of pedestrian controlled walk-behind cylindrical lawnmowers and rotary lawnmowers equipped with metallic cutting means; rigid non-metallic cutting means; or non-metallic cutting means with one or more elements pivotally mounted on a generally circular drive unit, where these cutting elements rely on centrifugal force to achieve cutting and have a kinetic energy for each single cutting element of greater than 10 J [kg-m²/s²]. UL 62841-4-3 does include a number of references to ISO 5395 and B71.1.

IV. CAL/OSHA'S EVALUATION

The Cal/OSHA evaluation states that incorporating the ANSI/OPEI 5395 standards would require referencing two different standards and would not provide a significant benefit for safety. Cal/OSHA opines certain provisions of the ANSI/OPEI 5395 standards provide additional or more stringent requirements than those in the ANSI B71.1 and B71.4 standards. These provisions include, but are not limited to, a faster stopping time for mower blades, requirements for sulky attachments⁴, and testing protocols for noise attachments. However, these requirements would not significantly increase worker safety, are addressed by current title 8 regulations, and would require references to two different standards that apply to the same equipment. This would create confusion and an added layer of

⁴ Sulky attachments are platforms or wheeled carts that attach to a commercial walk-behind lawn mower, turning it into a stand-on riding machine.

complexity for employers and Cal/OSHA staff in determining compliance with title 8 regulations.

Furthermore, Cal/OSHA does not support the incorporation of the incorporation of Underwriters Laboratories (UL) standards proposed by the petitioner (UL 1447-2017, UL 2753-2018, and UL 62841-4-3-2023)⁵ since it would reduce worker safety because the requirements are less effective than current title 8 regulations. Electric lawn mowers operate at electric potentials between 40 and 80 volts, with the most common voltage being 60 volts. Title 8 Low-Voltage Safety Orders apply to electrical equipment operating between 50 and 600 volts. Therefore, most electric lawn mowers would fall within the scope of the title 8 Group 1 Low-Voltage Safety Orders in addition to the General Industry Safety Orders. The UL standards proposed by the petitioner include requirements to reduce risks rather than eliminate hazards, whereas the applicable title 8 regulations (such as section 2340.2) requires hazards likely to cause death or serious physical harm to be eliminated.

Cal/OSHA further adds in contrast to the UL standards, which incorporate language to “reduce the risk, likelihood, or possibility” of a hazard, title 8 regulations, such as those included in Section 3.0 of its evaluation, prescribe requirements to eliminate hazards rather than merely reduce them. Including the UL standards proposed by the petitioner would, therefore, reduce the effectiveness of title 8 regulations and worker safety. Additionally, the UL 62841-4-3–2023 allows for warning labels for pedestrian controlled mowers of only 2.4 mm in height in contrast to the 3.25 in (82.5 mm) minimum height required by ANSI/OPEI B71.1-2017.

V. STAFF’S EVALUATION

The Board staff evaluation analysis states the Petitioner requests amendments to expand the scope of section 3563, in subsection (a) to include tractors manufactured in conformance with the OPEI 5395-3, UL 1447, 2753. The scope of OPEI 5395-2 and UL 62841-4-3 do not include tractors. The effect of the Petitioner’s proposal would extend coverage to newer models of powered lawn mowers. These additional units would not be covered under the regulation without the proposed amendment. Retaining coverage for electric/battery powered units would be accomplished through the adoption of the UL codes.

The Petitioner also proposes repealing the last sentence in subsection 3563(a). Board staff states it is not aware of any expansion or contraction of the scope of section 3563(a) introduced by this amendment.

With respect to subsection 3563(b)(2) the Petitioner seeks to expand coverage to include powered lawn mowers manufactured to conform to newer ANSI/OPEI codes and retain coverage of battery/electric powered lawn mowers that are manufactured to conform to recent edition of the B71.1 and B71.4 and relevant UL codes. Specifically, the Petitioner

⁵ Although the Cal/OSHA evaluation referenced consensus standards text as attachments, they cannot be provided because they are copyrighted published works.

requested changes to section 3563(b)(2) to include updates editions of the B71.1 and B71.4. The proposed change seeks to incorporate by reference the 2012 and 2017 editions of B71.1 and B71.4.⁶ Further, the Petitioner seeks to include the 2024 editions of ANSI/OPEI 5393-2 and 3. Finally, the Petitioner proposes to also incorporate by reference UL 62841, UL 1447 and UL 2753 to address electric and battery powered lawn mowers.

In subsequent discussions with the Petitioner, the Petitioner explained that the new ANSI/OPEI 5395-2 and 5395-3 were based upon the International Organization for Standardization (ISO) code for “Garden Equipment.” Additionally, battery and electric powered lawn mowers were not covered under the ANSI/OPEI standards. Consensus standards for battery and electric powered lawn mowers are published by UL.

Board staff infers that the Petitioner’s concern is that voluntary compliance with the ANSI/OPEI 5395-2 and -3 would shift newly manufactured powered lawn mowers away from the criteria required under ANSI/OPEI B71.1 and B71.4 and thus no longer consistent with section 3563(b)(2) and (3). Board staff shares the concern that newer and electric powered lawn mowers require updated references under section 3563.

From a safety perspective, the Board evaluation states according to federal OSHA data there have been 30 non-fatal incidents and 2 fatal incidents from 2014 – 2023⁷ involving lawn mowers in California.

Board staff inquired from Cal/OSHA whether title 8, section 3563(b)(2) and 3563(b)(3) have been cited during the period beginning in 2014 through 2024. Cal/OSHA reported that there are no citations for section 3563(b)(2) or (3) were issued by Cal/OSHA in that period. Thus, it does not appear that safety is a major concern to address when considering this proposed petition. Subsequently, Board staff recommends granting the Petitioner’s request

⁶ The following are the specific consensus code which the Petitioner requests for inclusion into title 8 and were referenced as attachments in the Cal/OSHA evaluation:

- ANSI/OPEI B71.1-2012 standard for Consumer Turf Care Equipment Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications;
- ANSI/OPEI B71.1-2017 standard for Consumer Turf Care Equipment Walk-Behind Mowers and Ride-On Machines with Mowers-Safety Specifications;
- ANSI/OPEI B71.4-2012 standard for Commercial Turf Care Equipment Safety Specifications;
- ANSI/OPEI B71.4-2017 standard for Commercial Turf Care Equipment-Safety Specifications;
- ANSI/OPEI 5395-2-2024 standard for Combustion-Engine-Powered Lawnmowers – Part 2: Pedestrian-Controlled Lawnmowers;
- ANSI/OPEI 5395-3-2024 standard for Combustion-Engine-Powered Lawnmowers – Part 3: Ride-On Lawnmowers;
- UL 62841-4-3-2023 standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 4-3: Particular Requirements for Pedestrian Controlled Walk-Behind Lawnmowers;
- UL 1447-2017 standard for Electric Lawn Mowers; and
- UL 2753-2018 Outline of Investigation for Battery Operated Ride-On Lawn Mowers.

⁷ Amputation (18), Avulsion (1), Burns (1), Crushed by (1), Fall (1), Fracture (2), Laceration (3), Pinch point (1), Pulled-in (1), Roll Over (2) and Struck by (1)

as to sections 3563(a) and (b)(2).

The Petitioner's requested change repeals requirements for powered lawnmowers manufactured after Sept. 2, 2010, to be affixed with a durable label stating the powered lawnmower is manufactured in accordance with the acceptable ANSI B71.1 or B71.4. The Petitioner argues that the requirement is not included in any editions of cited standards, has no safety benefit and imposes an undue burden unique to California.

Board staff disagrees with the proposed repeal. In the absence of such a label, the employer must seek other means of assurance that the lawnmower meets a particular consensus standard – especially if such adherence to a consensus standard is required.

VI. DISCUSSION

In their evaluations, Cal/OSHA and Board took different perspectives on the effect the Petitioner's proposal to incorporate by reference OPEI and UL standards as well as removal of labeling requirements for power lawn mowers manufactured after September 2, 2010, required by subsection 3563(b)(3).

Cal/OSHA cited numerous examples where it believes the proposed changes would result in less safety. However, the ANSI/OPEI B71.1 version of the consensus code referenced is from 2017, not the current 2024 code. In 2024, OPEI replaced B71.1 and B71.4 with ANSI/OPEI 5395 (-1, -2 and -3) to harmonize with international mower standards (ISO 5395). Additionally, section 3563(b)(2) incorporates this standard by reference, keeping it constantly updated.

Board staff in its evaluation recognized that gaps remain. The Board staff evaluation suggests the Petitioner's changes to incorporate the OPEI and UL codes be granted to ensure continued compliance as they pertain to newer and electric powered lawn mowers.

While Cal/OSHA cited federal regulations and other general title 8 regulations as examples of safety provisions like guarding, Board staff believes California's regulatory framework relies directly upon the consensus codes for more specific subject matter safety requirements. Unlike Federal OSHA's requirements, the consensus codes interweave the guarding requirements throughout their texts. The ANSI codes, for example, contain blade enclosure requirements and limit the openings to the spinning blades. The criteria for low voltage components, controls, brakes and signage are also described in the consensus codes. Thus, the consensus codes offer specificity in what components need to be guarded and the configurations of those guards rather than applying general guarding requirements.

VII. CONCLUSION AND ORDER

The Board has considered the petition of Dan Mustico of Outdoor Power Equipment Institute, Inc. to update subsections 3563(a), (b)(2), and (b)(3). For reasons stated in the preceding discussion, Petition 614 is GRANTED in part and DENIED in part. As to subsections 3563(a) and 3563(b)(2), Petitioner's request is GRANTED to the extent Board

staff considers the necessity of convening an advisory committee to discuss the best way to update section 3563 with the most relevant ANSI/OPEI and UL consensus standards while maintaining safety. As to subsection 3563(b)(3), Petitioner's request is DENIED.