

**OCCUPATIONAL SAFETY  
AND HEALTH STANDARDS BOARD**

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

TITLE 8: Division 1, Chapter 4, Subchapter 4, Article 22, Section 1648; and  
Article 25, Sections 1675 and 1678 of the Construction Safety Orders; and  
Subchapter 7, Article 4, Sections 3276, 3277, 3278, 3279, and 3280;  
Article 5, Section 3287; Article 11, Section 3413; and Article 13, Section 3458.1  
of the General Industry Safety Orders

**Portable Ladders****MODIFICATIONS AND RESPONSE TO COMMENTS RESULTING FROM  
THE 45-DAY PUBLIC COMMENT PERIOD**

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

**Proposed Section 3276. Portable Ladders.****Proposed subsection (a) Scope.**

Proposed subsection (a) would instruct the reader that proposed Section 3276 would apply to all self-supporting and non-self-supporting portable ladders. The proposed subsection was modified to clarify that this section would not apply to ladder type step stools or other types of step stools except for the definition of "step stool (ladder type)" in subsection (b) and the design and construction requirements of subsection (c)(5). The proposed modification is necessary to address stakeholder comments that the proposal created confusion regarding its application to step stools.

**Proposed subsection (b) Definitions.**

Proposed subsection (b) was modified to add the following definition: "Step stool (ladder type). A self-supporting, foldable, portable ladder, nonadjustable in length, 32 inches or less in length, with flat steps and without a pail shelf, designed so that the ladder top cap as well as all steps can be climbed on. The side rails may extend above the top-cap but such extension is not considered as part of the step stool length." With respect to design and construction requirements, the new proposed definition is consistent with the definition provided in the ANSI A14 ladder standards

that subsection (c) incorporates by reference. The new proposed definition is necessary to clarify the term “step stool (ladder type)” used in revised subsections (a) and (c)(5).

Proposed subsection (c)(5).

Proposed subsection (c) pertains to design and construction requirements. Proposed subsection (c) was modified to add a new subsection (c)(5) which would provide that ladder type step stools shall be designed and constructed such that the rungs, cleats, and steps are not less than 8 inches apart, or more than 12 inches apart, as measured between center lines of the rungs, cleats, and steps. The proposed revision is consistent with the design and construction requirements in the ANSI A14 ladder standards that proposed subsection (c) incorporates by reference. The proposed modification is necessary to be at least as effective as (ALAEA) federal 29 CFR 1926.1053(a)(3)(ii).

Proposed subsection (d)(4).

Proposed subsection (d) pertains to ladder selection. Proposed subsection (d) was modified to add new subsection (d)(4) which would provide that ladders used in connection with outdoor advertising structures shall be Type I, IA, or IAA duty rated and shall be used in accordance with Section 3413. The proposed modification is necessary to inform the reader that additional ladder requirements, contained in Section 3413, apply to ladders used in connection with outdoor advertising structures.

Proposed subsection (e)(1) Maintenance.

Proposed subsection (e)(1) was modified to additionally provide that metal ladders shall not be exposed to acid or alkali materials that are capable of corroding the ladder and reducing the ladder’s strength, unless the employer obtains and follows the recommendations of the ladder manufacturer or a qualified person regarding exposure to corrosive materials. This new proposed provision would replace proposed subsection (e)(5)(A) which provided that when metal ladders are to be subjected to deteriorating agents, a protective coating shall be applied in accordance with the manufacturer’s guidelines. The proposed modification is necessary to clarify the term “deteriorating agents”, and to replace the requirement that a protective coating be applied in accordance with the manufacturer’s guidelines, with a requirement to follow the recommendations of the ladder’s manufacturer or a qualified person, because applying a protective coating may not be recommended.

Proposed subsection (e)(2). Inspection.

Proposed subsection (e)(2), which would provide that ladders be inspected by a competent person for visible defects prior to the start of the shift and after any occurrence that could affect their safe use, was modified to replace “competent person” with “qualified person” and to replace “prior to the start of the shift” with “periodically”. Section 3207, which defines terms for general use in the standards contained in the General Industry Safety Orders (GISO), defines “qualified person, attendant or operator” as a person designated by the employer who by reason of his/her training and experience has demonstrated the ability to safely perform his/her duties

and, where required, is properly licensed in accordance with federal, state, or local laws and regulations. This definition is consistent with the task of performing ladder inspections and other sections of Title 8 provide that similar tasks be performed by a qualified person. The modifications are necessary for clarity and consistency. The modifications are also necessary to address employers' concerns that at facilities with flexible shifts, it is not feasible to inspect all ladders prior to the start of the shift; and the number of inspections required for compliance, along with the documentation of those inspections, would be unnecessarily burdensome.

Proposed subsections (e)(5), (e)(5)(A), and (e)(5)(B).

Proposed subsection (e)(5) was modified to remove "Protective" from the subsection's title, Protective Coatings and to include "Surface" to read "Surface Coatings". These modifications are necessary because the following modification to proposed subsection (e)(5) would make the subsection applicable to all surface coatings.

Proposed subsection (e)(5)(A) was modified to revise the text of the proposed provision, relocate the modified provision to subsection (e)(1), and delete subsection (e)(5)(A). The necessity for modifying proposed subsection (e)(5)(A) is explained in the description of the proposed modifications to proposed subsection (e)(1).

The provisions of proposed subsection (e)(5)(B) were relocated to proposed subsection (e)(5) and subsection (e)(5)(B) was deleted. This modification is necessary to maintain the logical numbering of the subsections.

Proposed subsection (e)(11). Access to Landings.

Proposed EXCEPTION.

Proposed subsection (e)(11) would provide that when portable ladders are used for access to an upper landing surface, the side rails shall extend not less than 36 inches above the upper landing surface to which the ladder is used to gain access; or when such an extension is not possible, then the ladder shall be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grab-rail, shall be provided to assist employees in mounting and dismounting the ladder. The proposed exception to subsection (e)(11) would exempt employers from the requirement to provide a grasping device, provided that personal fall protection is used in accordance with Article 24 of the Construction Safety Orders (CSO), Article 36 of the High-Voltage Electrical Safety Orders (HVESO), Article 12 of the GISO, or Article 1 of the Telecommunication Safety Orders (TSO). Proposed modifications to the exception would add provisions to clarify that operations or conditions not specifically covered by Article 36 of the HVESO, Article 12 of the GISO, or Article 1 of the TSO shall comply with the fall protection provisions in Article 24 of the CSO. This modification is necessary to specify the fall protection provisions that would apply when the work being performed does not come under one of the referenced Articles. The modified exception would be numbered EXCEPTION No. 1. The added numbering is necessary because the proposed modifications to subsection (e)(11) include the addition of a new exception.

New EXCEPTION No. 2.

Proposed subsection (e)(11) was modified to add a new exception to exempt emergency rescue and emergency rescue training operations from the requirements of subsection (e)(11) where it is not practical to extend a ladder 36 inches above the landing surface. The proposed new exception is necessary because it is not practical to perform some emergency rescue and training operations, such as entering or exiting through a small window opening, with the access ladder extended 36 inches above the landing surface.

Proposed subsection (e)(15).

Proposed subsection (e)(15) would provide that when it is not practical to work with the body near the middle of the step or rung, the ladder shall be secured to the top support, and the employee shall be protected by a personal fall protection system in accordance with Article 36 of the HVESO, Article 24 of the CSO, Article 12 of the GISO, or Article 1 of the TSO. Proposed modifications to the exception would add provisions to clarify that operations or conditions not specifically covered by Article 36 of the HVESO, Article 12 of the GISO, or Article 1 of the TSO shall comply with the fall protection provisions in Article 24 of the CSO. This modification is necessary to specify the fall protection provisions that would apply when the work being performed does not come under one of the referenced Articles.

Proposed subsection (e)(16)(D).

Proposed subsection (e)(16)(D) would prohibit the use of two-section extension ladders, made of metal or reinforced plastic, longer than 72 feet. The proposal was modified to specify a maximum length of 48 feet for two-section metal extension ladders, a maximum length of 60 feet for three-section metal extension ladders, and a maximum length of 72 feet for two-section reinforced plastic extension ladders. These modifications are necessary to be ALAEA federal 29 CFR 1910.26(a)(2)(ii).

Proposed subsection (e)(16)(E).

Proposed subsection (e)(16)(E) would specify a minimum overlap of 34 inches for two-section extension ladders up to and including 32 feet in length. The proposal was modified to specify a minimum overlap of 36 inches for two-section extension ladders up to and including 32 feet in length. This modification is necessary to be ALAEA federal standards 29 CFR 1910.25(d)(2)(xiii) and 29 CFR 1910.26(a)(2)(iii) which require a minimum overlap of 36 inches for all ladders up to and including 36 feet.

Proposed subsection (e)(19). Transporting.

Proposed subsection (e)(19) would provide that ladders transported on motor vehicles shall be properly supported and secured to prevent falling. The proposal was modified to delete this provision. This modification is necessary because the proposed provision was vague; the need for the provision was not supported by accident reports of employees being injured by ladders

falling during transport. Also, the proposed provision was not necessary to prevent employees from using damaged ladders because, if a ladder falls from a vehicle, subsection (e)(2) would require that ladders be inspected for damage after any occurrence that could affect their safe use. Proposed Section 3276(e)(3) would require that the ladder be withdrawn from service, if damaged.

Proposed subsection (e)(20).

Proposed subsection (e)(20) was modified to renumber subsection (e)(19). This modification was necessary to maintain the logical numbering of the subsections.

Proposed subsection (f). Employee Training.

Proposed subsection (f) provides that before an employee uses a ladder, the employee and the employee's supervisor shall be provided training in the safe use of ladders. The proposal was modified to require supervisor training only for supervisors of employees who routinely use ladders, and to exempt employers from the requirement to train employees and supervisors if the employer can demonstrate that the employee or supervisor is already trained in ladder safety as required by this subsection. This modification is necessary because it avoids unnecessary, duplicative training.

SUMMARY AND RESPONSES TO ORAL AND WRITTEN COMMENTS

**Mr. Ken Nishiyama Atha, Regional Administrator, Region IX, OSHA, U.S. Department of Labor, by letter dated December 14, 2009.**

KNA1: Mr. Atha stated that Section 3276(e)(16)(D) would allow two-section metal or reinforced plastic extension ladders to be a maximum length of 72 feet. This provision would not be as effective as the federal standard, 29CFR 1910.26(a)(2)(ii), which does not allow two-section extension ladders of any type to exceed 48 feet in length.

Response: Proposed Section 3276(e)(16)(D) would allow two-section metal or reinforced plastic extension ladders to be a maximum length of 72 feet. It would also allow two-section wood extension ladders to be a maximum length of 60 feet, which is the same length permitted by the existing standard for wood ladders. When amending Section 3276(e)(16)(D), the intent was to specify a maximum length for two-section extension ladders consistent with the requirements in the existing Title 8 ladder standards and the federal ladder standards; and rely on the applicable 2007ANSI A14 ladder standards for guidance when there was no existing State or federal specification.

Federal Section 1910.26 only applies to portable metal ladders. Section 1910.26(a)(2)(ii) provides that two-section metal extension ladders shall not exceed 48 feet in length, and over two-section metal extension ladders shall not exceed 60 feet in length. Federal Section 1910.25 only applies to portable wood ladders. Section 1910.25(a)(3)(iii) provides that two-section wood extension ladders longer than 60 feet shall not be supplied. There is no federal requirement

regarding the maximum length of two-section reinforced plastic ladders used in general industry. Federal Section 1926.1053 pertains to ladders used in the construction industry, including job-made ladders. Section 1926.1053 does not specify the maximum length of two-section extension ladders; however, it does provide that ladders built and constructed in conformance with the applicable provisions of ANSI A14.1-1982, ANSI A14.2-1982, ANSI A14.5-1982 will be deemed to meet the load test requirements specified in Section 1926.1053. The referenced ANSI ladder standards allow two-section portable wood, metal, or plastic extension ladders up to a maximum length of 60 feet; and three-section metal or plastic ladders up to 72 feet.

It is likely that erecting and working on a 48 foot two-section metal ladder would present less risk of injury than would a 60 foot ladder, and erecting and working on a 60 foot three-section ladder would present less risk than would a 72 foot ladder; therefore, to be at least as effective as (ALAEA) the federal standard, the Board modified the proposal to replace the proposed length limit for two-section metal extension ladders with a requirement that two-section metal ladders shall not be longer than 48 feet and three-section metal extension ladders shall not be longer than 60 feet.

KNA2: Mr. Atha stated that Section 3276(e)(16)(E), which proposes two-section extension ladders up to and including 32 feet have a minimum overlap of 34 inches, is not ALAEA federal standards 29CFR 1910.25(d)(2)(xiii) and 29CFR 1910.26(a)(2)(iii) which require a minimum overlap of 36 inches for all ladders up to and including 36 feet.

Response: Currently the State and federal requirements regarding the minimum overlap for two-section metal or plastic extension ladders are identical. The proposed overlap requirements are identical to those in the 2007 ANSI A14 standards for wood, metal, and plastic ladders. The proposal would increase the required overlap by 10 inches for all two-section extension ladders longer than 32 feet, up to 60 feet. However, the proposal would lessen the required overlap by 2 inches for ladders 32 feet or less. Therefore, to be ALAEA the federal standards, the Board modified the proposal to require an overlap of 36 inches for ladders up to and including 32 feet. The Board thanks Mr. Atha for his comments.

**Ms. Elizabeth Treanor, Director, Phylmar Regulatory Roundtable, by letter dated December 10, 2009.**

ET1: Ms. Treanor expressed concern about the incorporation by reference of standards developed by outside organizations into Title 8; in this case, specifically, ANSI/ALI 14.2-2007. She expressed the following concerns regarding the incorporation of consensus standards by reference: 1) the standards are expensive and not available in the public domain, 2) the standards frequently reference other standards which reference other standards into virtually an endless loop, requiring employers to find all the referenced standards, and 3) many of the standards have since been updated and may be difficult to obtain or are no longer available. Ms. Treanor stated the incorporation by reference may be less of a concern with ladders, but the practice is a public policy concern.

Response: Amended Section 3276(c), Design and Construction, would require that all portable ladders, except job-made cleat ladders and special purpose ladders, meet the design and

construction requirements of one of the ANSI portable ladder standards, ANSI A14.1, ANSI A14.2, ANSI A14.5, or ANSI A14.10, which apply to wood, metal, reinforced plastic, and special duty ladders, respectively. The proposal would also incorporate the most recent version of the ANSI standards by reference. The existing general industry portable ladder standards for wood, metal, and reinforced plastic ladders already incorporate the ANSI ladder standards by reference and provide that the safety requirements for each of these types of ladders meet the requirements of the applicable ANSI standard. The proposal would narrow the scope of this provision by clarifying that the only requirements in the ANSI standards that portable ladders must meet are the ANSI design and construction requirements. Purchasing a ladder with an ANSI label will ensure that the ladder complies with the design and construction requirements of the referenced ANSI standards as required by amended Section 3276(c); therefore, the proposal would not place an unreasonable burden on employers to purchase or find the referenced ANSI standards. The Board is not aware of any reliable alternative to incorporation of the ANSI standards by reference which would ensure that the ladder selected for use will support its intended load; therefore, the Board declines to modify the proposed incorporation of the ANSI standards by reference.

ET2: Ms. Treanor stated that requiring ladder inspections before each shift is excessive, unreasonably burdensome and will not improve workplace safety, and the necessity of such a requirement has not been established for general industry. She believes the requirement will have a particularly adverse impact on large manufacturers who may use dozens of portable ladders in factory settings, not just those in construction-related trades. For example, if an employer has three shifts a day and over 200 ladders, it would require over 600 inspections per day, and over 3,000 per week. She believes that this can be resolved by having separate requirements for construction and general industry. She stated that ladders do not need to be inspected as frequently in general industry because in general industry ladders are not typically used on uneven ground, are not in heavy use, and are typically stacked carefully in the workplace. She recommended that the Board either require “periodic inspections” in general industry, as required by Federal OSHA, or include language such as “inspected prior to each day’s use”. She requested that the Board require periodic inspections identical to the federal requirement.

Response: It is reasonable to inspect ladders frequently where they are subject to constant use and heavy loads, and less frequently where they are only occasionally used for light loads. To provide employers with the flexibility to establish the frequency of ladder inspection based on how ladders are used in their particular work place, the Board modified proposed Section 3276(e)(2) to replace “prior to the start of the shift” with “periodically”, as requested by Ms. Treanor. The Board believes that a requirement for periodic inspection along with proposed new subsection (f), Employee Training, which requires that employees be provided training on the maintenance, inspection, and removal of damaged ladders from service, will reasonably ensure that damaged ladders are not used.

ET3: Ms. Treanor stated that although the regulation does not specifically require documentation of each ladder inspection, documentation is necessary because there is no other way for an employer to demonstrate compliance with the requirement. She stated that the cost of performing and documenting ladder inspections would create a statewide adverse economic

impact directly affecting business, and suggested that this could be resolved by having separate requirements for general industry and construction.

Response: Ms. Treanor is correct that the proposal does not specifically require documentation of each ladder inspection. There are numerous construction industry and general industry standards that require specific equipment, such as slings, hooks, scaffold lumber, suspension wire ropes, body belts, lanyards, controlled descent apparatus, respirators, industrial trucks, and jobsite vehicles, be inspected before each use or prior to each day's use. These standards are all silent as to whether the inspections must be documented. In response to Comment #2 from Ms. Treanor, the Board proposes to modify amended Section 3276(e)(2) to replace "prior to the start of the shift" with "periodically". Further modifications to the proposal to separate the requirements for general industry from those for construction as suggested by Ms. Treanor would not resolve her concerns regarding documentation of ladder inspections because any proposed general industry ladder standard must be ALAEA the federal standard for portable wood and metal ladders used in general industry which requires that ladders be inspected frequently and after they tip over. Section 3203(a)(4) provides that employers implement procedures for identifying and evaluating work place hazards, including scheduled periodic inspections to identify unsafe conditions and work practices. Section 3203(b)(1) provides that employers keep a record of scheduled and periodic inspections required by subsection (a)(4), including person(s) conducting the inspection, the unsafe conditions and work practices that have been indentified and action taken to correct the identified unsafe conditions and work practices. The proposal would not create a new obligation on the employer to document ladder inspections; therefore, the Board believes it is not necessary to modify the proposal to specifically address this concern.

ET4: Ms. Treanor stated that the term "competent person," as defined in Section 1504, is typically more of a supervisory person and a person with knowledge to perform excavation, asbestos, cadmium and other operations requiring a higher level of expertise than is required for performing ladder inspections. For example, in Section 1541(c), "Structural ramps that are used solely by employees as a means of access or egress from excavations shall be designed by a competent person." Whereas, in Section 1541(b)(1)(c), "Only qualified persons shall perform subsurface installation locating activities, and all such activities shall be performed in accordance with ...". She stated that the first example sounds like an engineer and the second example sounds like a trained employee. She believes that the term "qualified person" is sufficient for conducting ladder inspections because qualified persons are able to identify hazards relative to the procedures they are to follow for a specific job task. She noted that Section 1504 defines "Qualified Person, Attendant or Operator as a person designated by the employer who by reason of training, experience or instruction has demonstrated the ability to safely perform all assigned duties and, when required, is properly licensed in accordance with federal, state, or local laws and regulations." She recommended that the term "competent person" be replaced with "qualified person" as this will provide clarity regarding who may inspect the ladders.

Response: Section 3207, which defines terms for general use in the standards contained in the GISO, defines "qualified person, attendant or operator" as a person designated by the employer who by reason of his training and experience has demonstrated the ability to safely perform his duties and, where required, is properly licensed in accordance with federal, state, or local laws and regulations. Section 3207 does not define "competent person," nor does Article 4 of the

GISO, which contains the portable ladder standards. Therefore, for clarity and consistency with the GISO, the Board modified proposed Section 3276(e)(2) to replace “competent person” with “qualified person”, as requested by Ms. Treanor.

ET5: Ms. Treanor noted that Section 3276(f) reads: “Employee Training. Before an employee uses a ladder, the employee and the employee’s supervisor shall be provided training in the safe use of ladders. The training may be provided as part of the employer’s Injury and Illness Prevention Program required by Section 3203.” Although this requirement exceeds the federal standard, she agrees that training is a more effective way to deal with the inspection of ladders. However, she reasons that because ladders are commonly used, many people already know how to use them safely, and requiring training for people who do not need it would be redundant and would not improve workplace safety. Therefore, she recommended that the training provisions include an exemption for employees and supervisors with previous experience, to add a third sentence, as follows: “For employees and supervisors with previous ladder training and experience, no additional training is necessary.”

Response: It may not be necessary to repeat training for some employees who already have ladder training and experience; however, it is not safe to assume that every employee who has had ladder training and experience prior to employment knows how to safely use ladders to perform tasks in their new place of employment. The ladders, the tasks, and/or the conditions of use may be significantly different from the employee’s prior experience and their previous training may not be adequate for the new workplace. The Board modified the proposal to provide an exception to the employee training requirement where the employer can demonstrate that the employee and supervisor are already trained in ladder safety as required by Section 3276(f). The Board believes the exemption addresses Ms. Treanor’s concerns regarding unnecessary, redundant ladder training. The Board thanks Ms. Treanor for her comments.

**Ms. Judith Freyman, Vice President, WOSH Operations, ORC Worldwide, by letter received December 14, 2009, and oral comments received at the December 17, 2009, Public Hearing.**

JF1: Ms. Freyman stated that proposed Section 3276(e)(2) requires a ladder be inspected by a competent person for visible defects prior to the start of the shift and after any occurrence that could affect its use. Also, while there is no specific requirement to document such inspections, it arguably is required pursuant to Section 3203(b). Ms. Freyman believes documentation would be burdensome and ineffective; therefore, there should be specific language in this provision that states that no documentation is required.

Response: See response to comment ET3.

JF2: Ms. Freyman stated that, in regards to the frequency of the required ladder inspection, the reference to specific shifts is confusing. In today’s 24/7 workplace, there may be no specific shifts, just employees reporting to work at different times or on staggered schedules. She suggests a more flexible approach that allows employers to conduct inspections periodically, with the appropriate frequency determined by workplace conditions. She therefore requested

deletion of “prior to the start of the shift” and substitution of “periodically” before the phrase “and after any occurrence that could affect their safe use.”

Response: See response to comment ET2.

JF3: Ms. Freyman stated that the ANSI standard, A14.1-2007, incorporated by reference in the proposed rules, includes step stools; however, the minutes of the advisory committee meeting provide support for the exclusion of step stools. She stated that, in addition to the reasons stated at the advisory committee meeting, step stools are less hazardous than portable ladders and should not require the same frequency of inspection as portable ladders. To avoid confusion on this important point, Ms. Freyman requested that step stools be specifically excluded from this rule.

Response: The consensus of the advisory committee was that step stools should not be included in the proposed portable ladder standard and it was not intended that step stools be included in the proposal. The ANSI standard for portable wood ladders, ANSI A14.1-2007, which proposed Section 3276 incorporates by reference, states that the ANSI standard does not cover step stools (furniture type), except ladder-type step stools. The ANSI standard also notes that while ladder type stools are covered by A14.1, it is recognized that a step stool standard is under development. When the step stool standard is approved, A14.1 will no longer cover ladder type step stools. The new standard will be A14.11. The Board agrees with Ms. Freyman that the proposal creates confusion regarding its application to step stools; however, step stools cannot be completely exempted from the standard because the federal standard governing ladders used in construction addresses step stools. Section 1926.1053(a)(3)(ii) provides that rungs, cleats, and steps of step stools shall be not less than 8 inches (20 cm) apart, nor more than 12 inches (31 cm) apart, as measured between center lines of the rungs, cleats, and steps. To be ALAEA the federal standard, the Board modified the proposal to incorporate the federal requirements for the design and construction of step ladders into proposed Section 3276(c)(5). Proposed 3276(c)(5) is consistent with section 6.5 of ANSI A14.1-2007, which provides that the steps of ladder type step stools shall be uniformly spaced at intervals of 8 to 12 inches. In response to Ms. Freyman’s comment, the Board also modified proposed Section 3276(a) to clarify that Section 3276 does not apply to step stools except for the design and construction requirements for ladder type step stools in modified subsection (c)(5). Lastly, the Board modified the proposal to add a definition for ladder type step stool in Section 3276(b). The Board believes that these modifications to the proposal will provide the clarity that Ms. Freyman requested. The Board thanks Ms. Freyman for her comments.

**Mr. Bruce Wick, VP Risk Management, California Professional Association of Specialty Contractors (CALPASC), by email received on December 15, 2009, and oral comment received at the December 17, 2009 Public Hearing.**

BW: Mr. Wick stated that the proposed revision to the portable ladder standards will clear up a great deal of confusion over which safety order applies and to what types of ladders. He supports the proposed amendments but stated that Section 3276(e)(2) needs to more clearly state the requirements and expectations regarding ladder inspection. Mr. Wick stated that the term “competent person” indicates that it is someone who has the authority to provide prompt

corrective action to eliminate a hazard if a ladder has to be pulled out of service or replaced due to a defect that would compromise the safety of that ladder. He stated that the use of the phrase “competent person” implies that the employee using the ladder is not competent to make his own decision about the safety of the ladder he is using. He asked that the final statement of reasons or the hearing record make it very clear that an employee who is trained to use a ladder is also trained to identify a defective ladder and have the authority to remove it from service under the employer’s supervision.

Response: See response to comments ET2 and ET4. The Board believes that the modified ladder inspection and employee training provisions of the proposal are sufficiently clear. The Board thanks Mr. Wick for his comments.

**Mr. Bill Taylor, South Chapter President, Public Agency Safety Management Association (PASMA), by letter dated December 14, 2009, and oral comments received at the December 17, 2009, Public Hearing.**

BT1: Mr. Taylor stated that their members employ firefighters who use portable ladders and that many of these fire departments conduct a weekly inspection of their portable ladders. Since many ladders are not used on a daily basis, it does not make sense to require daily inspections. He stated that many of these ladders are extremely heavy and to pull them on and off a fire truck for inspection presents an ergonomic hazard. He recommended deleting the proposed language in Section 3276(e)(2) and retaining the current language, which would still require fire personnel to inspect ladders on a regular basis. He believes that requiring ladders to be inspected regularly is a more reasonable requirement, which addresses the actual hazards in the fire service.

Response: See response to comment ET2.

BT2: Mr. Taylor stated that firefighters are trained to place the tip of a ladder below or at the same height as a window ledge so that they do not occlude the opening, thus blocking access or egress during a rescue scenario. He stated that Section 3276(e)(11) reads: “Access to Landings. When portable ladders are used for access to an upper landing surface, the side rails shall extend not less than 36 inches above the upper landing surface to which the ladder is used to gain access; or when such an extension is not possible, then the ladder shall be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grab rail, shall be provided to assist employees in mounting and dismounting the ladder. In no case shall the extension be such that ladder deflection under a load would, by itself, cause the ladder to slip off its support.” Mr. Taylor stated that this requirement may create an increased risk of death or injury to the firefighter and the person being rescued. He recommended that an exception be added to include the following language: “Exception: Accessing windows or other landings by fire and emergency personnel during rescue situations and while training for these incidents.”

Response: Mr. Taylor’s proposal would exempt rescue and rescue training operations from the requirement that a ladder shall extend 36 inches above a landing, unless the ladder is secured and a grasping device is provided. For some rescue operations, such as accessing a landing through a window opening, it may not be practical to extend a ladder 36 inches above a landing or secure a ladder or provide a grasping device; however, there are also many instances where it is practical

to extend a ladder 36 inches above a landing, such as accessing a roof. Therefore, the Board modified the proposal to provide an exemption from subsection (e)(11) during emergency rescue and emergency rescue training operations where it is not practical to extend a ladder 36 inches above the landing surface. The Board thanks Mr. Taylor for his comments.

**Mr. Patrick Singh, Director, Safety and Loss Control, Safeway, Inc., by written and oral comments received at the December 17, 2009, Public Hearing.**

PS1: Mr. Singh stated that proposed Section 3276(e)(2) requires an inspection by a competent person for visible defects prior to the start of the shift, but the regulation is silent on whether the employer must document the inspection to demonstrate compliance. He stated that documentation and retention will be burdensome without any corresponding increase in workplace safety or the effectiveness of the inspection. Mr. Singh requested at the very least the addition of language that specifically stated no documentation is required.

Response: See response to comment ET3.

PS2: Mr. Singh stated that the requirement for ladders to be inspected at the beginning of each shift is confusing and burdensome as multiple and staggered shifts exist in some locations and industry, such as the retail grocery industry where employees may be scheduled in at 10 pm, 11 pm, midnight, 4 am and 5 am to stock shelves using step stools. In this scenario, a store with 5 step stools and 8 employees could generate 40 inspections for the night and morning stocking shifts alone. He stated that a more practical inspection schedule such as “periodic” would be better and more effective. He noted that the federal ladder standard, 1910.26 requires ladders to be in good usable condition at all times and inspections are required under limited conditions, such as when a ladder tips over.

Response: See response to comment ET2.

PS3: Mr. Singh stated that the proposal incorporates ANSI standard A14.1-2007 by reference, which includes step stools (ANSI defines step stools to be ladder type 32 inches or shorter) and provides specific guidelines for their design and marking. It follows that step stools will be treated like ladders even though they do not pose similar hazards. He stated the ANSI approved stepstools are available and used by some employers, but others will be forced to purchase them at a higher cost than furniture type step stools available at your local hardware store, which will be burdensome and will not increase workplace safety. He requested that step stools be excluded from the proposed regulations, which is supported by discussions outlined in the advisory committee minutes dated December 3, 2008.

Response: See response to comment JF3.

PS4: Mr. Singh stated that incorporating ANSI standards by reference makes it difficult for a small business owner to determine what is required. He requested that, in lieu of incorporating ANSI standards, language similar to the federal Section 1910.26 should be considered for adoption.

Response: See response to comment ET1.

PS5: Mr. Singh stated that the proposed language creates a burden for businesses that operate in multiple states as it is substantially different from federal regulations for general industry; thus, a company operating in Nevada and California or Oregon and California would have to comply with two different standards for ladders and stepstools.

Response: Currently, employers in general industry with facilities in California and in states under federal OSHA jurisdiction must comply with separate federal standards for wood and metal ladders and separate State standards for wood, metal, and plastic reinforced ladders. The Board convened an advisory committee to consider a proposal to consolidate the State portable ladder standards for wood, metal, and plastic ladders used in general industry into one comprehensive standard. That advisory committee supported consolidating the standards. The proposed consolidation would increase protection for employees and reduce the employer's current burden of complying with three separate standards when, for the most part, the hazards and safe practices related to the use ladders is the same for wood, metal, or plastic ladders.

The Federal OSHA system allows "state plan" jurisdictions, such as California to adopt standards different from Federal OSHA standards, so long as the State standards are ALAEA the corresponding Federal standards. California has determined to utilize this system to adopt portable ladder standards suited to California needs, as those needs were perceived via such mechanisms as the advisory committee convened regarding this topic. Therefore, the Board declines to modify the proposal. The Board thanks Mr. Singh for his comments.

**Mr. Michael Kopulsky, President, Front Line Sales, Inc., by written and oral comments received at the December 17, 2009, Public Hearing.**

MK1: Mr. Kopulski stated that Section 3276(e)(2) requires that ladders be inspected by a competent person prior to the start of each shift. He asks if the inspection has to be documented and whether a definition of "competent person" will be provided.

Response: See responses to comments ET3 and ET4.

MK2: Mr. Kopulski stated that ANSI and OSHA have already acknowledged that a step stool, defined as "less than 32 inches", does not present the same degree of risk as a ladder which is used to convey people through a greater distance or height; it is simply used to help a shorter segment of our population to reach a height that others might be able to reach without the use of equipment, as well as, being a safer way to gain a step without using furniture; therefore, step stools should not have the same recording requirements as conventional ladders.

Response: See response to comment JF3.

**Mr. Tim Gotto, Regional Senior Safety Manager, West Region, Time Warner Cable, by written comments received at the December 17, 2009, Public Hearing.**

TG1: Mr. Gotto stated that ladder should be inspected prior to use by a “qualified person” and that no documentation of the inspection should be required.

Response: See responses to comments ET3 and ET4.

TG2: Mr. Gotto stated that the replacement of ladder parts should be accomplished by a “competent person.”

Response: Proposed Section 3276 does not specify the qualifications of the person who replaces ladder parts. Proposed Section 3276(e)(1) provides that portable wood ladders be maintained in good condition at all times, the joint between the steps and side rails shall be tight, all hardware and fittings securely attached, and the movable parts shall operate freely without binding or undue play. Proposed Section 3276(e)(3) states, “Ladders that have developed defects shall be withdrawn from service for repair or destruction; and tagged or marked as “Dangerous, Do Not Use” or with similar language. Ladders with broken or missing steps, rungs, cleats, safety feet, side rails, or other defects shall not be used.” In addition, portable ladders must meet the design and construction requirements of proposed Section 3276(c). The Board believes that these provisions establish effective criteria regarding ladder repair; and therefore, it is not necessary to modify the proposal to provide that ladder parts should be replaced by a competent person.

TG3: Mr. Gotto stated that proposed Section 3276(e)(15)(A) should clarify that telecommunication workers can use a body belt with safety lanyard to secure a ladder to a pole or strand.

Response: Section 8608 of the Telecommunications Safety Orders pertains to poles towers and ladders. Section 8608(j) states the following:

“When a ladder is supported by an aerial strand, and ladder hooks or other supports are not being used, the ladder shall be extended at least 2 feet above the strand and shall be secured to it (e.g. lashed or held by a safety strap around the strand and ladder side rail). When a ladder is supported by a pole, it shall be securely lashed to the pole unless the ladder is specifically designed to prevent movement when used in this application.”

Section 8608(j) specifically addresses the operation described by Mr. Gotto; therefore, for this specific operation the application of Section 8608(j) takes precedence over the application of Section 3276(e)(15)(A). Therefore, the Board declines to modify the proposal.

TG4: Mr. Gotto stated that proposed Section 3276(e)(15)(D) should allow telecommunication workers to transition to a pole with rungs by climbing through the top 3 rungs of an extension ladder.

Response: Since subsection (e)(15)(D) does not address climbing through the top three rungs of an extension ladder, it is assumed that Mr. Gotto is requesting an exemption from the provision

that prohibits employees from standing on the top three rungs of a ladder without a firm hand hold or fall protection. He does not propose any alternative means for preventing an employee from falling that would be equivalent to providing a hand hold or fall protection. Since it has not been established to the Board's satisfaction that this proposed revision is necessary or safe, the Board declines to modify the proposal. The Board thanks Mr. Gotto for his comments.

**Mr. John McCullough, Assistant Vice President, Wells Fargo of California Insurance Services, Inc., by letter received on November 25, 2009.**

JM1: Mr. McCullough expressed his concern that the table in Section 3276(d)(2) lists Type II and Type III ladders without a note or strikethrough that they are not to be used in industrial settings; therefore, an employer could mistakenly conclude that they are acceptable. He stated that an employer would have to know to go to GISO, Section 3413 to find out that only portable ladders at least Type I or higher can be used.

Response: Section 3276(d)(2) provides that ladders shall be used according to their duty classifications and provides a table listing the duty rating, ladder type, and working load for Type IAA, IA, I, II, and III ladders. Section 3413 pertains to ladders used for outdoor advertising structures. That section requires that all portable ladders used for outdoor advertising be rated Type I, IAA, or IAA. To address Mr. McCullough's concern, the Board modified proposed Section 3276(d)(4) to inform employers in the outdoor advertising industry that ladders used in connection with outdoor advertising structures shall be Type I, IAA, or IAA duty rated and shall be used in accordance with Section 3413.

JM2: Mr. McCullough expressed concern that new Section 3276(e)(2) would require that a company inspect all of their ladders on every shift in their entire facility, even in sections of the facility that would not be active each shift. The letter stated that this proposed change to a general industry section was made to ensure that it is at least as effective as a federal OSHA construction safety order; therefore, the change should be to the Construction Safety Orders – but change it to read as the federal construction standard reads – inspected by a competent person on a “periodic basis.”

Response: See response to comment ET2.

JM3: Mr. McCullough indicated that the applicability of the standard was unclear as to the height or number of steps which would be considered a portable ladder and thereby come under these proposed changes. He noted that one manufacturer of folding stands says they are manufactured to Type 1A rated ladders. He asked whether a step stool or folding stand which one manufacturer shows a vertical height of 28 ¼ inches with three steps, come under this standard.

Response: See response to comment JF3.

JM4: Mr. McCullough stated that most employers do not have easy access to ANSI standards; therefore, he requested that all referenced ANSI standards be included in any proposed standard or their references deleted.

Response: See response to comment ET1. The Board thanks Mr. McCollough for his comments.

**Mr. Terry Thedell, Health and Safety Advisor, San Diego Gas and Electric, by letter dated November 30, 2009.**

TT1: Mr. Thedell stated that he applauds the effort to consolidate similar standards between the construction and general industry ladder standards into one comprehensive ladder standard; however, his enthusiasm is tempered by the inclusion by reference of the ANSI/ALI 14.2-2007 standard that is not in the public domain and is expensive to obtain.

Response: See response to comment ET1.

TT2: Mr. Thedell stated that he agrees that the inspection of ladders is an important task; however, not all ladders are used each shift and suggests changing the wording to reflect that “ladders shall be inspected ... prior to use and after any occurrence that could affect their safe use.”

Response: See response to comment ET2.

TT3: Mr. Thedell recommended moving the ladder training requirements from the standard to a training specific appendix that provides the additional ladder safety training information such as frequency and severity of ladder incidents.

Response: The proposal would allow employers the flexibility to provide ladder safety training that is applicable to their work place. There are many excellent sources of ladder safety training information available free on the internet, including National Institute for Occupational Safety and Health (NIOSH) and OSHA publications. Incorporating the training provisions in the standard as proposed is consistent with the presentation of other Title 8 training requirements; therefore, the Board declines to modify the proposal as suggested.

TT4: Mr. Thedell stated that he agreed on the need to train employees in ladder safety that, in the normal course of their work, routinely use ladders; but, ladder safety training should only be required when practicable for incidental portable ladder users. He stated that requiring the full ladder safety training for administrative assistants, vice presidents, or directors would not be practicable when they use a ladder to simply remove a box from a shelf.

Response: The Board appreciates Mr. Thedell’s support for ladder training for employees who routinely use ladders; however the Board has reservations about providing ladder safety training for incidental ladder users only when practicable. The proposed modification lacks clarity, and there is evidence that incidental ladder use or use of ladders by administrative and management staff is a significant cause of injury. According to a NIOSH report, from 1980 to 1994 there were 8,102 workers killed by falls from elevation in the United States and the occupation of 513

(6.3%) of those workers was executive, administrative or managerial.<sup>1</sup> NIOSH reported that ladders accounted for 17% of fatal falls from elevation among the executive/administrative/manager occupational division. The Board believes it is necessary to provide training for all ladder users; however, the benefit of training the supervisors of employees who only use ladders occasionally is less clear. Therefore, the Board modified proposed Section 3276(f) to provide that supervisors need only be provided ladder safety training if the employees they supervise routinely use ladders. The Board thanks Mr. Thedell for his comments.

**Mr. Larry Pena, Manger of Corporate Safety, Policy and Regulations, Southern California Edison, by written and oral comments received December 17, 2009, at the Public Hearing.**

LP1: Mr. Pena stated that he supports the proposed amendments to the portable ladder standards; however, he recommended some modifications be made. In amended Section 3276(e)(2), he recommended that the term “competent person” be replaced by “qualified person,” as defined in Section 1504. He stated that this change is consistent with the training requirements in proposed subsection (f)(3), which references maintenance, inspection, and removal of damaged ladders from service. He stated that an employee who undergoes such training will be considered a “qualified person” by virtue of training, instruction and demonstrated ability.

Response: See response to comment ET4.

LP2: Mr. Pena stated that the frequency in the use of portable ladders varies in today’s industry; therefore, the language referencing inspection intervals should be changed to “prior to each days use”. He stated that this change is consistent with other regulations, such as Section 3421, General-Tree Work, subsection (e), “Prior to use, all equipment and safety devices shall be inspected ...”, and Section 3413, Ladders-Outdoor Advertising Structures, subsection (e) “All special purpose poster ladders shall be inspected for defects prior to use”, and Section 3667, Pole Climbers-Telecommunications, subsection (c), “Pole climbers shall be inspected as required in this section before each day’s use and ...” Mr. Pena stated that inspections prior to each day’s use will still provide the necessary employee safeguards without significant impact to employers.

Response: See response to comment ET2.

LP3: Mr. Pena stated that the provision in Section 3276(e)(19) that requires ladders be secured during transport falls outside the scope of the OSH Act and is too vague to enforce. He stated that if a ladder falls off a motor vehicle, it would require an inspection for defects as noted in proposed subsection (e)(2) which requires an inspection “after any occurrence that could affect their safe use”; therefore, he requested that “transportation” no longer be included in the new standard.

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<sup>1</sup> Worker Death By Falls, A Summary of Surveillance Findings and Investigative Case Reports, Part 1, Fatal Falls From Elevators, NIOSH, Sept. 2000.

Response: Proposed subsection (e)(19) is not necessary because subsection (e)(1) adequately addresses ladder maintenance, and subsection (e)(2) requires that ladders be inspected for damage after any occurrence that could affect their safe use. In addition, Section 3704 provides that all loads shall be secured against dangerous displacement either by proper piling or other securing means. For the reasons stated above, the Board modified the proposal to delete proposed Section 3276(e)(19).

LP4: Mr. Pena stated that proposed Section 3276(e)(15)(G), which prohibits moving, shifting, or extending ladders while occupied, is identical to federal Section 1926.1053(b)(11) except the proposal adds the additional words, “unless the ladder is designed and recommended for this purpose by the manufacturer.” He requested that the term “recommended” be deleted as it implies some sort of individualized signed warranty document from the manufacturer – and manufacturers generally do not warrant their products for a particular use. He states that it is up to the user to make sound application of the seller’s product.

Response: Use of the term “recommended” is not intended to require an individually signed warranty document from the manufacturer. The use of the term “recommended” is consistent with other Title 8 standards that require employers to follow the manufacturer’s recommendations with regards to the use of a product. Striking the term “recommended” and leaving it up to the user to make a sound application of the product would not be as effective as the counterpart federal standard, which does not provide an exception to the prohibition of moving an occupied ladder. For the reasons stated above, the Board declines to modify the proposal.

LP5: Mr. Pena stated that Section 3276(f) requires training of the employee and supervisor before an employee uses a ladder. He stated that non-specialized ladder usage is common among the general adult population and the product is readily available to the public; therefore, he recommended that employees and supervisors with previous ladder training and experience be exempted from attending additional training.

Response: See response to comment ET5. The Board thanks Mr. Pena for his comments.

**Mr. Willie Washington, Board Member, by oral comment received at the December 17, 2009, Public Hearing.**

WW: Mr. Washington stated that the standard needs to be clarified so the employer will know exactly who is the correct person to inspect ladders, and whether or not the person using a ladder is competent to determine that ladder is safe to use.

Response: See response to comment ET4 and the comment from Mr. Wick.

**Mr. Guy Prescott, Board Member, by oral comments received at the December 17, 2009, Public Hearing.**

GP1: Mr. Prescott suggested that the proposal be modified to indicate that a ladder must meet the ANSI standard in effect at the time of manufacture rather than at the time of purchase; thus,

if the ANSI standard is changed in the near future, the ladders currently available for purchase do not need to meet that new standard.

Response: The proposal requires that ladders comply with the national consensus standard incorporated by reference into the proposal, unless the ladder is already in service before the effective date of the proposal, in which case the ladder is to comply with the version of the national consensus standard in effect when the ladder was placed in service. This provision comports with the policies of the Office of Administrative Law, which, in effect, do not permit the Board to require compliance with versions of national consensus standards that do not yet exist. Thus, the Board declines to modify the proposal in the manner suggested by Mr. Prescott.

GP2: Mr. Prescott stated that he agreed with several of the comments regarding the use of the term “qualified person” as opposed to “competent person”, stating that under the definitions in Title 8, “qualified person” is the appropriate term. He asked that the choice of the term “competent person” be addressed in the final statement of reasons.

Response: See response to comment ET4.

GP3: Mr. Prescott asked that any cost associated with having a platform or landing between separate ladders be identified in the final statement of reasons.

Response: Proposed Section 3276(e)(10), Access to Elevated Work Areas, provides that except when portable ladders are used to gain access to fixed ladders (such as those on utility towers, billboards, and other structures where the bottom of the fixed ladder is elevated to limit access), when two or more separate ladders are used to reach an elevated work area, the ladders shall be offset with a platform or landing between the ladders. This provision is substantively the same as the federal construction standard, Section 1926.1053(a)(10), which provides that except when portable ladders are used to gain access to fixed ladders (such as those on utility towers, billboards, and other structures where the bottom of the fixed ladder is elevated to limit access), when two or more separate ladders are used to reach an elevated work area, the ladders shall be offset with a platform or landing between the ladders. With respect to portable ladders used in the construction industry to access elevated work areas, the State ladder provisions must be ALAEA federal Section 1926.1053(a)(10); therefore, the proposed provision does not impose an additional cost on the construction industry. With respect to general industry, Section 3270(a) provides that every permanent elevated work location shall be accessed by means of either fixed ladders or permanent ramps or stairways; therefore, portable ladders cannot be used for this purpose. In general industry, a mobile ladder stand, scaffold tower, aerial device or elevating work platform is generally used when a temporary or mobile elevated work area is needed. Section 3622(f)(8) requires that climbing ladders on scaffolds be affixed or built into the scaffold and a landing platform provided every 30 feet; therefore, the proposed portable ladder standard would not apply to these climbing ladders. The cost to general industry to comply with proposed Section 3276(e)(10) is expected to be minor due to the limited application of the provision in general industry.

**GP4:** Mr. Prescott stated that subsection (e)(15)(A) references the Electrical Safety Orders (ESO) and the Telecommunications Safety Orders (TSO), and he stated that it does not make sense to refer to either of these safety orders when addressing fall protection.

**Response:** The most comprehensive fall protection requirements in Title 8 are in Article 24 of the CSO; however, there are fall protection provisions in the TSO and High Voltage ESO that specifically pertain to work on poles and towers, and in the GISO that pertain to tree trimming and date palm operations. Where fall protection is used to comply with Section 3276(e)(15)(A) or Section 3276(e)(11), the intent of the proposal is to require that fall protection be used in accordance with the fall protection provisions that apply to the specific industry and operation. The intent of referencing each of the specific Articles and Safety Orders is that the fall protection requirements that apply to a specific industry would have precedence over applicable fall protection requirements in the GISO if the requirements conflict. The Board agrees with Mr. Prescott that the proposal lacks clarity as to how the referenced Articles and Safety Orders would apply to operations and conditions that are not specifically covered by one of the referenced Safety Orders. The Board modified proposed Section 3276(e)(11) EXCEPTION No. 1 to add the following clarifying text: “Operations or conditions not specifically covered by the fall protection provisions of Article 36 of the High-Voltage Electrical Safety Orders, Article 12 of the General Industry Safety Orders, or Article 1 of the Telecommunication Safety Orders shall comply with the fall protection provisions of Article 24 of the Construction Safety Orders.”

**GP5:** Mr. Prescott stated that the provision in subsection (e)(18) requiring signage for conductive ladders is already addressed in the ANSI standards, and having that provision in the proposal may be redundant.

**Response:** With respect to labeling, the provisions of proposed Section 3276(e)(18) are substantively the same as existing Section 3279(c)(11) which is proposed for deletion. The ANSI standard for portable metal ladders, ANSI 14.2-2007, does not cover all special purpose ladders. Also, the proposal provides that portable metal ladders be designed and constructed in accordance with the referenced ANSI standard. It does not specify that ladders must be labeled in accordance with the ANSI standard. For the reasons state above, the Board declines to remove the provision.

**Dr. Jonathan Frisch, Board Member, by oral comments received at the December 17, 2009, Public Hearing.**

**JDF1:** Dr. Frisch stated that if Class II or Class III ladders are not approved for use anywhere, they should be deleted from the reference table in Section 3276(d)(2).

**Response:** See response to comment JM1.

**JDF2:** Dr. Frisch suggested that the words “cleaned of” be replaced with “free of” in subsection (e)(4).

Response: Proposed Section 3276(e)(4) provides that ladders shall be cleaned of oil, grease, or slippery materials. The Board modified the proposal to replace “cleaned of” with “free of”, consistent with existing Section 3278(e)(6) and federal Section 1926.1053(b)(3).

JDF3: Dr. Frisch suggested that the term “deteriorating agent” be defined in the final statement of reasons.

Response: Proposed Section 3276(e)(5)(A) provides that when metal ladders are to be subjected to deteriorating agents, a protective coating shall be applied in accordance with the manufacturer’s guidelines. The proposed provision was modified and relocated to subsection (e)(1). The proposed modification provides that a metal ladder shall not be exposed to acid or alkali materials that are capable of corroding the ladder and reducing the ladder’s strength, unless the employer obtains and follows the recommendations of the ladder manufacturer or a qualified person regarding exposure to corrosive materials. The modification is consistent with ANSI A14.2-2007. The proposed modification improves clarity by replacing the ambiguous term “deteriorating agent.”

**Mr. Jack Kastorff, Board Member, by oral comments received at the December 17, 2009, Public Hearing.**

JK1: Mr. Kastorff stated that there had been a lot of comments regarding the frequency of inspection, when Section 3203 already requires periodic inspections of the workplace. He stated that the frequency of those inspections is not specified; the employer establishes the frequency. He suggested that similar language could be used in the proposal.

Response: See response to comment ET2.

JK2: Mr. Kastorff suggested that step stools be exempted from the proposal.

Response: See response to comment JF3.

**Mr. Steve Johnson, Safety Director, Associated Roofing Contractors of the Bay Area Counties (ARC-ABC), by oral comments received at the December 17, 2009, Public Hearing.**

SJ1: Mr. Johnson agreed with Mr. Wick and Mr. Pena regarding the definition of a competent person.

Response: See response to comment ET4.

SJ2: Mr. Johnson stated that ladders are tools that roofers use every day, from estimating the job through completion. He expressed concern regarding the transportation of ladders, stating that there are frequent reports of ladders on the freeway, which is an issue for the California Highway Patrol (CHP). He stated that employers stress to their employees that ladders must be securely fastened to the truck before leaving the job site.

Response: See response to comment LP3.

SJ3: Mr. Johnson requested that the regulation be clarified regarding the use of sectioned ladders.

Response: See response to comment KNA1. The Board thanks Mr. Johnson for his comments.

**Mr. Scott Harding, by oral comments received at the December 17, 2009, Public Hearing.**

SH1: Mr. Harding stated that consolidating all of the ladder requirements in one section makes sense, and he expressed appreciation for the Board for doing that.

Response: The Board thanks Mr. Harding for his support.

SH2: Mr. Harding proposed that Section 3278(c), which indicates that all parts be free from sharp edges, splinters, irregularities, and defects which affect the ladder's structural integrity, and references Section 1676 regarding job-made ladders be modified to specify those items which might affect the safety of the ladder, such as fasteners, nails, screws, or any protrusion of any kind that may cause an injury or catch on clothing, tools, belts, harnesses or equipment and potentially cause slippage or falls during ascent or descent. He stated that if there is any kind of protrusion when one is climbing a ladder, it could cause a fall; that includes job-made ladders, portable ladders, and extension ladders.

Response: Proposed Section 3276(c) provides, in part, that portable ladders be constructed according to the applicable ANSI ladder standard or Section 1676, which pertains to job-made ladders. The ANSI ladder standards provide that ladders be manufactured free of sharp edges and burrs greater than 1/64 of an inch. Section 1676 provides that wood ladders be constructed free of sharp edges and splinters. It also prohibits the use of double headed nails. Proposed Section 3276(e)(1) provides that ladders be maintained in good condition at all times, the joint between the steps and side rails shall be tight, all hardware and fittings securely attached. In addition subsection (f)(6), employee training, provides that employees receive training on factors that contribute to falls. These provisions provide reasonable protection against falls due to snagging clothing or equipment on protrusions; therefore, the Board declines to modify the proposal to prohibit any kind of protrusion.

SH3: Mr. Harding stated that Section 3278(e)(3) requires frayed or badly damaged ropes to be replaced and ladders to be taken out of service if they are damaged or defective, although subsection (e)(1) already requires ladders to be maintained in good condition at all times. He stated that a more precise definition of "good" may be required, as that term may be interpreted differently by different employers. He stated that it is not enough for an employer to tell an employee that a particular ladder is not to be used because it is defective; if they are available and accessible, employees will use them, regardless of damage or defect. He suggested that destroying the ladder, rather than attaching a "Do Not Use" tag or sticker, might be a better way to take it out of service to prevent it from being used.

Response: Proposed Section 3276(e)(1) provides that ladders be maintained in good condition at all times, the joint between the steps and side rails shall be tight, all hardware and fittings securely attached, and the movable parts shall operate freely without binding or undue play. The provision provides examples of what is considered good condition; therefore a definition of the term “good condition” is not necessary. Proposed Section 3276(e)(3) provides that ladders which have developed defects shall be withdrawn from service for repair or destruction; and tagged or marked as "Dangerous, Do Not Use" or with similar language; ladders with broken or missing steps, rungs, cleats, safety feet, side rails, or other defects shall not be used. It is not necessary to destroy a damaged ladder if it is taken out of service, since it might be susceptible to proper repair.

SH4: Mr. Harding stated that Section 3276(e)(4) requires rungs to be kept free of grease and oil, and suggested that the definition of the term “slippery materials” be expanded to include dew, mud, etc., rather than just oil and grease because ladders become slippery in cold, damp, foggy weather conditions as well.

Response: It would be impractical to prohibit the use of ladders in cold, damp, foggy weather or to require that ladders be cleaned of water (conditions that would fall within the suggested expanded definition of “slippery materials”). Therefore, the Board declines to modify the proposal. The Board thanks Mr. Harding for his comments.

**Ms. Joan Gaut, California Teachers Association by oral comments received at the December 17, 2009, Public Hearing.**

JG: Ms. Gaut asked the Board to remove step stools from the regulation.

Response: See response to comment JF3. The Board thanks Ms. Gaut for her comments.

**Mr. Kevin Bland, California Framing Contractors Association and the Residential Contractors Association, by oral comment received at the December 17, 2009, Public Hearing.**

KB: Mr. Bland expressed agreement with Mr. Pena’s and Mr. Wick’s comments. He also stated that the inspection issue had been discussed for a good portion of the advisory committee meeting, and his understanding was that the inspection would be part of the construction industry’s safe practices or Injury and Illness Prevention Program; the inspection would not be required every single day.

Response: See response to comment ET2. The Board thanks Mr. Bland for his comments.

**Mr. Julio Petrini, by oral comment received at the December 17, 2009, Public Hearing.**

JP: Mr. Petrini stated that common sense might dictate that, in the case of grocery stores, a supervisor could check the ladder each day and fill in the log, rather than having each employee that may use that ladder check it at the beginning of his or her shift.

Response: See response to comment ET2. The Board thanks Mr. Petrini for his comments.

**Mr. John Bobis, Aerojet, by oral comments received at the December 17, 2009, Public Hearing.**

JB1: Mr. Bobis stated that the definition of “qualified person” is clearly defined in all of the Title 8 safety orders to mean a person who has the proper education, experience, and demonstrated knowledge of the subject matter to identify potential dangers or damage associated with particular equipment.

Response: See response to ET4.

JB2: Mr. Bobis stated that in regard to the inspection requirement, a damaged rung on a ladder is fairly obvious, even to the untrained eye. He further stated that the record-keeping requirement is unnecessarily burdensome for employers, and it should be removed from the proposal.

Response: See response to ET3.

JB3: Mr. Bobis suggested that Section 3276(f)(4) be amended to indicate that three-point contact with the ladder is required at all times.

Response: Proposed Section 3276(f)(5) requires that employees be provided training on climbing and working on ladders, including the user’s position and points of contact with the ladder. Proposed Section 3276(e)(15)(C) provides that when ascending or descending a ladder, the user shall face the ladder and maintain contact with the ladder at three-points at all times. The proposal does not require that the user maintain three-point contact with the ladder at all times because it is not always necessary, such as when working on a step ladder or platform ladder. Therefore, the Board declines to modify the proposal. The Board thanks Mr. Bobis for his comments.

**Mr. Gerald Fulghum, by letter dated December 4, 2009, and written addendum dated December 5, 2009.**

GF1: Mr. Fulghum stated that the new language of Section 3276(e)(9) is a composite of several existing regulations currently in effect, and it incorporates existing Section 1675(i); however, all the existing regulations in Section 1675 were complemented by Section 1675(j), which requires that all portable ladders in use be tied, blocked, or otherwise secured to prevent their being displaced. He stated that this is an important safety requirement, and even more so where a portable ladder is used to gain access and provide egress to an upper working level, because the displacement and slipping of non-self-supporting ladders used for this purpose has caused innumerable injuries and deaths to construction workers. In support of the above statement, he conducted a database search of reported and investigated accidents involving slipping, falling and displacement of non-self-supporting ladders using the federal OSHA FAT/CAT screening tool. He noted that threshold for reporting workplace accidents under current federal OSHA requirements is a fatality or hospitalization of 3 or more employees, per 29CFR Part 1904.39(a) (sic). He states that, in conducting his survey, he determined the following:

1. 1,163 accidents occurred as a result of non-self-supporting ladders slipping, falling, and being displaced.
2. He read in detail a sampling of 220 individual accident investigations conducted (19% of the total).
3. 59 of the 220 sampling were attributed to the ladder being unsecured (26.8% of 220).
4. The data suggest and supports a finding that approximately 311 serious injuries or deaths were anticipated to be the result of failing to secure a portable ladder.
5. Of the serious injuries or deaths, approximately one half of the total were where the ladder was unsecured and being used to gain access to an upper level working area, such as a roof, floor, or non-scaffold platform.
6. Given the higher federal standard for reporting accidents, and the majority – if not all of ladder accidents involve only one person using the ladder, it is not unreasonable to opine the number of serious injuries reflected in his research is deceptively low.

Mr. Fulghum also provided a copy of Section 1675(d) that was in effect in 1979, which he stated is clearly on point for the requirement to secure non-self-supporting ladders, and provides for five suggested ways for securing ladders. Mr. Fulghum stated that in light of the above, and with consideration to the long existing and sound requirement of the unambiguous language of Section 1675(j), he would advocate the Board retain the requirement and language of existing Section 1675(j) in proposed Section 3276(e)(9). He also implored the Board to amend the language of proposed Section 3276(e)(11) to require all non-self supporting ladders used for access to upper working level be tied, blocked, or otherwise secured to prevent their being displaced. He stated that the act of getting off or onto the ladder has been proven to unload the ladder at its feet and cause a side-load on the ladder structure, which results in the ladder slipping out at the base, or sliding sideways – both conditions likely to result in catastrophic injury or death.

Response: Proposed Section 3276(e)(9) is substantively the same as existing Section 3278(e)(7), which is proposed for deletion, and federal Section 1910.25(d)(2)(i). Existing Section 1675(j), which is also proposed for deletion, states: “Portable ladders in use shall be tied, blocked, or otherwise secured to prevent their being displaced.” The primary difference between proposed Section 3276(e)(9) and Mr. Fulghum’s suggested modification, which incorporates the text of existing 1675(j), is that the proposal requires ladders to be placed at approximately a 75-degree angle or be secured while Mr. Fulghum’s suggested modification would require both. Approximately 75 degrees is the optimum angle of inclination for ladder stability as it pertains to slipping laterally at the top or outward at the base. The ANSI portable ladder standards referenced in proposed Section 3276(c), Design and Construction, require single and extension ladders other than wood ladders, be equipped with shoes, spurs, and other slip resistant devices; and, pass a bottom slip test at an angle of inclination of 75½ degrees. When it is not possible to place a ladder at the required angle of inclination due to space limitations or obstructions, the proposal requires the ladder to be secured to prevent slipping. The proposed comprehensive ladder standard consolidates the provisions in existing Section 1675 and the GISO ladder standards that address the hazard of the ladder slipping at the top or base, and it also provides preventive measures not found in the existing standards which address contributing factors to these types of accidents. These preventive measures include: prohibiting overreaching,

providing scaffolds or other worker positioning equipment when work cannot be safely done from ladders, providing fall protection, and employee training. For the reasons stated above, proposed Section 3276(e)(9) and (e)(11), in conjunction with the other provisions of the proposed standard, is adequate to prevent ladders from slipping at the top or base, including ladders used for access to landings, and would allow operations to be done safely where it is not possible for a ladder to be inclined at a 75 degree angle. Therefore, the Board declines to modify the proposal.

GF2: Mr. Fulghum stated that existing Sections 1675 and 3277, which refers to the requirements for fixed ladders in Section 3277, are not equivalent to the counterpart federal OSHA regulation, and the Board should adopt the federal language to be at least as effective as the counterpart federal regulation Section 1926.1053(a)(6)(i) which states: “The rungs and steps of fixed metal ladders manufactured after March 15, 1991, shall be corrugated, knurled, dimpled, coated with skid-resistant material, or otherwise treated to minimize slipping.” He stated that failure to comply with this requirement has resulted in many injuries.

Response: This rulemaking proposal was noticed to the public as a proposal to amend Title 8 standards to consolidate the standards that pertain to portable ladders. It is beyond the scope of this rulemaking proposal to make substantive changes to the standards governing fixed ladders. Staff will evaluate whether the state standards governing the use of fixed ladders in construction and general industry are ALAEA the counterpart federal standards and, if appropriate, will initiate action for possible future rulemaking.

GF3: Mr. Fulghum stated that the current regulations for Section 1676, Job-Made Ladders, require revision because many of the long-standing requirements for the safe construction of job-made ladders contained in ANSI A14.4 are not required in Section 1676. He stated that, although this is beyond the scope of the present Board proposal, it is a matter the Board should take up soon to insure that job-made ladders are properly constructed and of adequate structural strength to prevent injuries to workers.

Response: The Board agrees with Mr. Fulghum that amending Section 1676 to incorporate the provisions of ANSI A14.4 is beyond the scope of the present rulemaking proposal. The Board thanks Mr. Fulghum for his comments.

#### MODIFICATIONS AND RESPONSES TO COMMENTS RESULTING FROM THE FIRST 15-DAY NOTICE OF PROPOSED MODIFICATIONS

As a result of written comments in response to the proposed modifications contained in the First15-Day Notice of Proposed Modifications mailed on July 1, 2010, the following non-substantive, substantive, and sufficiently-related modifications have been made to the Informative Digest published in the California Regulatory Notice Register dated October 30, 2009.

Proposed Section 3276. Portable Ladders.

Proposed subsection (e)(2). Inspection.

Proposed subsection (e)(2) would provide that ladders shall be inspected by a qualified person for visible defects periodically and after any occurrence that could affect their safe use. The proposal was modified to replace “periodically” with “frequently”. This modification is necessary to be ALAEA federal standard 29 CFR 1910.25(d)(1)(x).

SUMMARY AND RESPONSES TO WRITTEN COMMENTS

Mr. Ken Nishiyama Atha, Regional Administrator, Region IX, OSHA, U.S. Department of Labor, by letter dated July 20, 2010, as modified, and Mr. Jose Benavides, by e-mail dated July 29, 2010.

Comment: Federal OSHA does not consider proposed Section 3276(e)(2), which requires ladders to be inspected periodically, at least as effective as (ALAEA) 29CFR 1910.25(d)(1)(x), which requires ladders to be inspected frequently. (In a letter dated July 20, 2010, Mr. Nishiyama Atha said that the State’s proposal was not ALAEA in two respects, but Federal OSHA, via Mr. Benavides’ e-mail, limited Federal concern to the single issue discussed here.)

Response: To be ALAEA the federal standard, the Board modified proposed Section 3276(e)(2) to require that ladders be inspected frequently. The Board thanks Mr. Atha for his comment.

Mr. Bill Taylor, President, Public Agency Safety Management Association - South Chapter, by e-mail dated July 12, 2010.

Comment: Mr. Taylor expressed his support for the proposal.

Response: The Board thanks Mr. Taylor for his support and participation in the rulemaking process.

Mr. Bruce Wick, Director of Risk Management, California Professional Association of Specialty Contractors, by e-mail dated July 19, 2010.

Comment: Mr. Wick expressed his support for the proposal as modified, and, on behalf of Mr. Kevin Bland, indicated that the California Framing Contractors Association and the Residential Contractors Association also support the proposal.

Response: The Board thanks Mr. Wick and Mr. Bland for their support and participation in the rulemaking process.

Ms. Anne Katten, Pesticide and Work Safety Project Manager, California rural Legal Assistance Foundation, by e-mail dated July 20, 2010.

Comment #1: Ms. Katten stated that the standard will be clearer and will better protect workers if a ladder inspection is required at the start of each shift or prior to each day of use rather than periodically.

Response: The initial proposal noticed for public hearing required that ladders be inspected “prior to the start of the shift”. Employers commented that it would not be feasible to implement the proposed inspection schedule at facilities with flexible shifts. Other employers commented that the number of inspections required, and the documentation of those inspections, would be unnecessarily burdensome. In response to those comments a 15-day Notice was issued to modify the proposal to require that ladders be inspected “periodically” to provide employers with the flexibility to establish the frequency of ladder inspections based on the use of ladders in their particular work place. Federal OSHA commented that the proposed modification was not as effective as the federal standard, which requires that ladders be inspected “frequently” (see the comment from Mr. Jose Benavides). In response to the federal opinion, the Board modified the proposed provision a second time. Proposed Section 3276(e)(2) requires that ladders be inspected by a qualified person for visible defects frequently and after any occurrence that could affect their safe use. In addition, proposed new subsection (f) requires that employees be provided training on ladder maintenance, ladder inspection, and removal of damaged ladders from service. The Board believes that training ladder users on ladder maintenance and inspection will increase the frequency and quality of inspections. The Board believes that the proposed ladder inspection and maintenance requirements, along with employee training provisions, will prevent damaged ladders from being used and injuring employees. The Board declines to modify the proposal.

Comment #2: Ms. Katten stated that she is concerned by the deletion of the requirement that ladders transported on motor vehicles to be properly supported and secured to prevent falling. She stated the requirement is needed to prevent damage to the ladder and injury to workers who are working near a motor vehicle carrying ladders around a field or other worksite. She suggested that an alternative would be to reference Section 3704 which provides that all loads shall be secured against dangerous displacement.

Response: Section 3276(e)(19), the provision that was deleted, was vague as to the action the employer was obligated to take to comply with the requirement to properly support and secure ladders from falling when transported on motor vehicles. The provision was intended to prevent damage to ladders during transport. The Board is not aware of evidence which supports that the provision is necessary to prevent injury to employees, and the Board does not believe that a reference to Section 3704 is necessary for that purpose. Proposed Section 3276(e)(2) would require ladders to be inspected by a qualified person frequently and after any occurrence that could affect their safe use. If a ladder falls from a motor vehicle, that provision would require that the ladder be inspected by a qualified person for defects, and if the ladder is damaged, proposed Section 3276(e)(3) would require that the ladder be withdrawn from service. The Board declines to modify the proposal.

Comment #3: Ms. Katten stated that she is concerned that the proposal does not require training if the employer can demonstrate that the employee is already trained in ladder safety and does not specify how the employer will demonstrate that the employee is already trained. She asked whether the employer will be required to verify that the previous employer provided ladder training, or will the employer be allowed to have employees sign a form stating that they already received training? She expressed concern that workers will be pressured to sign forms stating that they have been trained even if they have not. She also states that previous training may not be adequate for the new workplace if ladders are used under conditions that expose employees to new hazards, such as using ladders on uneven ground.

Response: Section 3276(f), as proposed for public hearing, required that before an employee uses a ladder, the employee and the employee's supervisor shall be provided training on the safe use of ladders. The proposed modification clarifies that, if the employer can demonstrate that an employee is already trained in ladder safety as required by the subsection, the employer is not required to repeat the training for that employee. The subsection additionally requires that the training address the topics listed in subsections (f)(1) through (f)(7), unless the employer can demonstrate that a topic is not applicable to the employer's workplace. Where ladders are used under conditions that expose an employee to a hazard that was not addressed in the training provided by a previous employer, proposed subsection (f) would require the employer to provide the employee with additional training to address that hazard. For example, if an employee had not received instruction on using ladders on uneven ground, proposed subsection (f)(4) would require the employer to provide training on how safely to erect and secure a ladder on uneven ground. In addition, Section 3203 requires that the employer provide training to all new employees and employees given new job assignments for which training has not been received. Section 3203 also provides requirements for documentation of required safety training. To demonstrate compliance with the training requirements of proposed Section 3276(f), the employer may ask employees to sign a form stating that they have previously received training, or the employer may verify that a previous employer provided ladder training to the employee. In regards to employees feeling pressured to sign a form documenting that the employee received training even though the training was not provided, such pressure in the form of threats to lay off or discharge of employees appears to the Board to be a violation of Labor Code section 6311. The proposal comprehensively provides that all employees be trained on the safe use of ladders, and it avoids unnecessary, duplicative training. The Board declines to modify the proposal.

Comment #4: Ms. Katten expressed support for the proposal as originally noticed for public hearing, and she noted that falls from ladders are a major source of serious injuries in agriculture. She referenced a recent study which found that 31% of the 13,068 worker's compensation claims in Washington State orchards between 1996 and 2001 involving compensation for lost work time were for ladder related injuries which cost over \$21.5 million over this six year period.

Response: The Board believes that the proposal in its present form comprehensively addresses portable ladder hazards, as has been discussed in the responses to Ms. Katten's other comments, and the Board declines to reinstate the original proposal. The Board thanks Ms. Katten for her comments, support, and participation in the rulemaking process.

MODIFICATIONS AND RESPONSES TO COMMENTS RESULTING FROM  
THE SECOND 15-DAY NOTICE OF PROPOSED MODIFICATIONS

No further modifications to the information contained in the Initial Statement of Reasons are proposed as a result of the Second 15-Day Notice of Proposed Modifications mailed on August 24, 2010.

SUMMARY AND RESPONSES TO WRITTEN COMMENTS

There were no written comments received.

DOCUMENT RELIED UPON

Division of Occupational Safety and Health Form 9, Request for New, or Change in Existing Safety Order, dated January 23, 2007.

This document is 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 Drive, Suite 350, Sacramento, California.

ADDITIONAL DOCUMENT RELIED UPON

Worker Death By Falls, A Summary of Surveillance Findings and Investigative Case Reports, Part 1, Fatal Falls From Elevations, U.S. Department of Health and Human Services, September 2000.

This document is 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 Drive, Suite 350, Sacramento, California.

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DOCUMENTS INCORPORATED BY REFERENCE

1. American National Standard for Ladders – Wood Safety Requirements, ANSI-ASC A14.1 – 2007.
2. American National Standard for Ladders – Portable Metal – Safety Requirements, ANSI-ASC A14.2-2007.
3. American National Standard for Ladders – Portable Reinforced Plastic – Safety Requirements, ANSI-ASC A14.5-2007.

These documents are too cumbersome or impractical to publish in Title 8. Therefore, it is proposed to incorporate the documents by reference. Copies of 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.

ADDITIONAL DOCUMENTS INCORPORATED BY REFERENCE

None.

DETERMINATION OF MANDATE

These standards 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 standard. 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.