

**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 11, Sections 1598 and 1599  
of the Construction Safety Orders

**Use of High Visibility Apparel****MODIFICATIONS AND RESPONSES 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 sufficiently related modifications that are the result of public comments and/or Board staff evaluation.

**Section 1598. Traffic Control for Public Streets and Highways.**

Modifications are proposed to delete the phrase “in accordance with” for replacement by the phrase “labeled as meeting” in subsection (c) and for replacement by the phrase “and labeled as meeting” in subsection (d) and to delete the references to Sections 1-12 and Appendices B and C and Sections 4-9.4.8 and Appendices A through C, respectively, and to delete the incorporation by reference of ANSI/ISEA 107-2004 in both referenced subsections.

These modifications are necessary to avoid having the employer (end user) purchase the referenced national consensus standard which requires all high visibility apparel (HVA) to be marked and labeled.

Further modification to this proposal consists of adding a new subsection (e) to require the employer to select the appropriate type of HVA in accordance with either Appendix B of the ANSI/ISEA 107-2004 standard, consulting the HVA manufacturer, or referring to other reputable source of HVA selection information. This proposed modification is necessary to ensure that employees are effectively protected from the hazards of vehicular traffic in all working conditions.

**Section 1599. Flaggers.**

Modifications are proposed to delete the phrase “in accordance with” for replacement by the phrase “labeled as meeting” in subsection (d) and for replacement by the phrase “and labeled as meeting” in subsection (e) and to delete the references to Sections 1-12 and Appendices B and C

and Sections 4-9.4.8 and Appendices A through C, respectively, and to delete the incorporation by reference of ANSI/ISEA 107-2004 in both referenced subsections.

These modifications are necessary to avoid having the employer (end user) purchase the referenced national consensus standard which requires all HVA to be marked and labeled.

Further modification to this proposal consists of adding a new subsection (f) to require the employer to select the appropriate type of HVA in accordance with either Appendix B of the ANSI/ISEA 107-2004 standard, consulting the HVA manufacturer, or referring to other reputable source of HVA selection information. This proposed modification is necessary to ensure that employees are effectively protected from the hazards of vehicular traffic in all working conditions.

## SUMMARY AND RESPONSES TO ORAL AND WRITTEN COMMENTS

### I. Written Comments

Mr. Ken Nishiyama Atha, Regional Administrator, Region IX, U.S. Department of Labor, Occupational Safety and Health Administration, by letter dated September 19, 2008.

#### Comment:

Mr. Nishiyama Atha stated that Federal OSHA Region IX has determined that this proposal is at least as effective as the federal standard.

#### Response:

The Board acknowledges Mr. Nishiyama Atha's comment establishing the proposal as being at least as effective as the federal standards.

The Board thanks Mr. Nishiyama Atha for his comment and participation in the Board's rulemaking process.

Mr. Kevin White, Health and Safety Director, California Professional Firefighters (CPF), by letter dated October 15, 2008.

#### Comment:

Mr. White suggests the addition of language to the proposal so that the proposal addresses personal protective equipment (PPE) worn by firefighters.

Response:

This proposal was noticed by the Board as proposed amendments to Sections 1598 and 1599 of the CSO. Sections 1598 and 1599 do not apply to firefighters or to law enforcement or to emergency medical service (EMS) personnel; Sections 1598 and 1599 apply to highway construction workers and flaggers engaged in highway and other construction operations, in keeping with Section 1502, which specifies the applicability of the CSO and makes it clear that the CSO apply to construction activities and not firefighting, law enforcement or EMS.

Since the scope and application of the CSO do not include firefighting operations, it should be clear to Cal Fire that the standards contained in the CSO, unless the standards are specifically cross-referenced in the GISO, do not apply to fire fighting, law enforcement or EMS operations. The Board staff has not ascertained any GISO cross-references that would make such operations subject to the CSO provisions impacted by this proposal.

Consequently, no modification to this proposal as suggested by Mr. White is necessary.

The Board thanks Mr. White for his comment and participation in the Board's rulemaking process.

Mr. Bill Taylor, CSP, Safety Manager, City of Anaheim, by letter dated October 15, 2008.

Comments No. 1 and No. 2:

Mr. Taylor submitted two comments, numbered No. 1 and No. 2. In comment No. 1, Mr. Taylor states that he is concerned that the proposal does not adequately address safety hazards posed by fire, police or EMS personnel who are or may be required to work in streets and highways. In the case of law enforcement, the HVA vest requirements spelled out in the ANSI/ISEA 107-2004 standard could interfere with the officer's ability to reach for his weapon or allow a potential perpetrator to grab the vest. The public safety vest requirements in ANSI/ISEA 207-2006 allow for tear away vests that will not get caught on a police officer's gun belt and also improve visibility of police officers and other first responders. Therefore, Mr. Taylor stated he would like to see the ANSI/ISEA 207-2006 standard which is appropriate for law enforcement personnel be included in this proposal.

In comment No. 2, Mr. Taylor cites an April 2008 University of Michigan study entitled, "The Conspicuity of First-Responder Safety Garments" as supporting evidence to recommend that firefighters be permitted to comply with HVA that meets the requirements of the National Fire Protection Association (NFPA) 1971 standard and law enforcement should be allowed to use HVA that meets the requirements of the ANSI/ISEA 207-2006 standard. In fact, Mr. Taylor stated that all three standards should be recognized as equivalent to each other; ANSI/ISEA 107-2004, ANSI/ISEA 207-2006, and the NFPA 1971.

Responses to Comments No. 1 and No. 2:

See the Board's response to Mr. Kevin White's letter to the Board, dated October 15, 2008.

Therefore, the Board believes no modification to this proposal is necessary.

The Board thanks Mr. Taylor for his comments and participation in the Board's rulemaking process.

Mr. John C. Vocke, Attorney, Pacific Gas and Electric Company (PG& E), by letter dated October 16, 2008.

Comment No. 1:

Mr. Vocke, on behalf of PG&E, objects to the incorporation by reference of the ANSI/ISEA 107-2004 Guideline on Selection Use and Care of High-Visibility Safety Apparel into the CSO. Mr. Vocke expressed concern that the regulated public has no recourse but to have to pay \$60 to obtain the referenced ANSI/ISEA standard contained in the proposed language to learn the terms of the standard because of the way the proposal is worded. This adds cost to the proposal on top of what costs the employer must incur to comply with the updated apparel requirements.

Response to Comment No. 1:

In response to Mr. Vocke's concern over the regulated public having to purchase a copy of the standard, the Board is sympathetic to the extent that Board staff is proposing modifications to the proposal that Board staff believes will mitigate this concern. Since HVA manufacturers have been designing and producing HVA in compliance with the ANSI/ISEA 107-2004 for a number of years, and the standard requires marking and labeling by the manufacturer be provided that specifies the class of the garment and that the apparel is compliant with the ANSI/ISEA 107-2004, the proposal is modified to delete the incorporation by reference and simply require the HVA to be labeled as meeting the requirements of the ANSI/ISEA 107-2004, which is the way it is produced by the manufacturer. It nonetheless remains important that employers not merely select a labeled garment, but that they select the appropriate garment for the job. Therefore, a new subsection (e) has been added to Section 1598 and a new subsection (f) has been added to Section 1599 to address the selection of the proper type of HVA in accordance with the guidance from the HVA manufacturer or Appendix B of ANSI/ISEA 107-2004 (which is not copyrighted), or from other reputable source of such information.

Comment No. 2:

Mr. Vocke stated that the ANSI/ISEA guideline contains permissive language which could cause problems between the employer and the Division of Occupational Safety and Health in the form of contested citations as well as potential additional variance applications. Mr. Vocke also notes that the ANSI/ISEA standard also contains non-mandatory appendices which are being proposed

for incorporation by reference as enforceable regulations. Therefore, Mr. Vocke suggested remanding this issue to an advisory committee for consideration.

Response to Comment No. 2:

Please see the Board's response to Mr. Vocke's Comment No. 1. Even though ANSI/ISEA 107-2004 is no longer incorporated by reference, the ANSI/ISEA standard provides guidance in the form of Appendices to aid the employer/end user in performing one of the most critical functions for the ultimate safety of the employee, selection of the appropriate class of HVA in relation to the occupational scenario or use scenario, and Appendix B is still listed as an employer resource in Section 1598(e) and Section 1599(f).

The Board believes that the modifications discussed address Mr. Vocke's concerns and therefore, believes an advisory committee is not necessary.

The Board thanks Mr. Vocke for his comments and participation in the Board's rulemaking process.

II. Oral Comments

Oral Comments Received at the October 16, 2008 Public Hearing in Oakland, California.

Mr. Dave Teter, Battalion Chief and Safety Officer, representing Cal Fire.

Comment:

Mr. Teter stated that employers involved in firefighting are required to comply with the provisions of the General Industry Safety Orders (GISO), not the Construction Safety Orders (CSO). Mr. Teter indicated that compliance with federal regulations under 23 CFR 634 requires firefighters involved in operations on federally regulated highways to wear high visibility apparel (HVA) which poses a problem for firefighters as such clothing lacks the fire retardant characteristics critical to effectively safeguard the firefighter. Mr. Teter indicated that the federal Department of Transportation granted law enforcement an exemption from wearing HVA under certain conditions. Mr. Teter also indicated that firefighters refer to standards by the National Fire Protection Association (NFPA) to determine what type of apparel firefighters will wear. The NFPA provides for apparel that is rated for the exposure. This comes into play in situations where firefighters are responding to incidents along public highways where they may be exposed to flame and heat. Cal Fire interprets this proposal as a requirement that firefighters responding to incidents along public highways must wear HVA that is inappropriate for protecting employees against the effects of heat and flame. Cal Fire is concerned about unfunded mandates to purchase and maintain HVA as result of this proposal.

Response:

The regulations found at 23 CFR 634 are not OSHA regulations and have no bearing on this proposal. Also, please see the Board's response to Mr. Kevin White's letter to the Board dated October 15, 2008.

Therefore, the Board believes no modification to this proposal is necessary.

The Board thanks Mr. Teter for his comments and participation in the Board's rulemaking process.

Dr. Jonathan Frisch, OSHSB Member and Mr. Mark Dolim, Personal Protective Equipment (PPE) Specialist, Belkin Curtis and Sons.

Comment:

Dr. Frisch expressed concern that HVA might be used by employees in other industries, such as electrical work, and that if there are no fire resistant standards for HVA, such apparel might be worn by employees who may be exposed to a fire and a situation may be created where it is not possible for the employer to comply.

Mr. Dolim responded by stating that there is fire resistant acrylic material that can be used in an HVA vest but it is hardly what one would consider suitable for firefighters. He also stated that electrical workers wear jumpsuits that protect them from being burned. He also stated that whichever vest they use will "shrink wrap" around their clothing when exposed to high temperatures, so there will be conflicting issues.

Response:

This proposal pertains to construction operations regulated by the CSO and does not address PPE for electrical workers which are addressed in Title 8, Electrical Safety Orders (ESO). The ESO address PPE for low-and high-voltage applications and require that equipment be approved as defined in those orders for their intended use. The Board states that this subject is outside the scope of this proposal which pertains to the proposed amendments to CSO, Sections 1599 and 1598.

Therefore, the Board believes no modification to this proposal is necessary.

The Board thanks Mr. Dolim for his comments and participation in the Board's rulemaking process.

Mr. Nathan Trauernicht, California Fire Chiefs Association.

Comment:

Mr. Trauernicht confirmed that there are HVA vests that are designed to be fire resistant and that they would meet the needs of firefighters. He suggested modifying the proposal to exempt fire service personnel during active firefighting efforts and/or those incidents creating a highly flammable atmosphere on a federal right of way and to allow the use of NFPA compliant PPE during such situations. Mr. Trauernicht believes this exemption provides for enhanced firefighter visibility when operating outside of the exemption while reducing the risk to firefighters while they are actively suppressing fires.

Response:

See the Board's response to Mr. Kevin White's letter to the Board, dated October 15, 2008.

Therefore, the Board believes no modification to this proposal is necessary.

The Board thanks Mr. Trauernicht for his comment and participation in the Board's rulemaking process.

Mr. Rick Griggs, Cal Fire.

Comment:

Mr. Griggs stated that federal standards in 23 CFR 634.2 and 634.3 define people on foot whose duties place them within a right of way of a federal aid highway and this definition includes responders to incidents and law enforcement personnel; therein, lies the concern that California will apply Sections 1598 and 1599 to such personnel, including fire fighters. Mr. Griggs noted that most fire departments already have a traffic incident management policy that addresses hazard mitigations.

Response:

This federal definition is not a Title 8 definition. Title 8 defines the applicability of a given safety order via the scope and application of the particular safety order, and the Board has determined that CSO, Sections 1598 and 1599 do not share the federal definition and do not apply to the employers involved in firefighting, law enforcement or EMS services. Therefore, no modification of this proposal is necessary.

The Board thanks Mr. Griggs for his comment and participation in the Board's rulemaking process.

Mr. Kevin White, Health and Safety Director for California Professional Firefighters and Mr. John MacLeod, OSHSB Chairman.

Comment:

Mr. White commented on language in the proposal that states “where a hazard exists to employees because of traffic or haulage conditions of worksites encroaching upon public highways”, specifically, the meaning of the word “employees” which unless defined as referring only to construction employees would create concern that Sections 1598 and 1599 would apply to firefighters. He suggested a new subsection (e) that states “firefighters engaged in emergency operations where they are directly exposed to flame, fire, and/or hazardous materials shall wear appropriate personal protective equipment as specified in the standards of the National Fire Protection Association and when they are engaged in all other operations, safety apparel as described in this section shall be worn by fire and emergency medical services personnel.” Therefore, Mr. White contends that by putting the exemption in this standard, it removes any doubt about the intent of the proposal.

Chairman Macleod responded by asking Mr. White whether any fire personnel had ever been subjected to enforcement action by the Division over failing to comply with construction industry standards. Mr. White responded that he was not aware of any such incidents.

Response:

The term “employees” as used in the context of the language of Sections 1598 and 1599 of the CSO refers to construction industry employees and the Board contends this is well understood and sufficiently clear. Therefore, the Board believes no modification of this proposal as suggested by Mr. White is necessary.

In response to Chairman MacLeod’s question, the Board stands by its earlier statement that CSO, Sections 1598 and 1599 do not apply to firefighters.

The Board thanks Mr. White for his comment and participation in the Board’s rulemaking process.

Captain Antonio Duran, Safety Officer, Los Angeles County Fire Department; Chairman John MacLeod, OSHSB; Dr. Jonathan Frisch, OSHSB Member; Mr. Jack Kastorff, OSHSB Member; and Mr. Larry McCune, Division of Occupational Safety and Health.

Comment:

Captain Duran stated that his employer had been cited by the Division for violation of fall protection standards specified in the CSO as a result of an accident that occurred during firefighting operations which during a training exercise, an employee suffered a fall in which he was injured. He expressed agreement with Mr. White’s proposed exemption.

Chairman MacLeod asked whether the GISO includes fall protection standards for firefighters and Captain Duran responded that the GISO does address fall protection for firefighters. Captain Duran commented that the CSO fall protection standards are inappropriate for firefighting. Chairman MacLeod asked whether this citation was appealed and Captain Duran responded that it was and it was dismissed.

Mr. Kastorff asked whether it was the Division's position that firefighting is covered under the CSO. Dr. Frisch expressed concern about portions of the CSO that might apply to employees outside of construction as it appears the Division may have held firefighters to the CSO standards. He also wondered whether this HVA proposal could be problematic for employees involved in firefighting.

Mr. McCune responded that there are some overlaps between the CSO and the GISO. The comment regarding fall protection in the GISO refers to certain sections of the CSO. Mr. McCune noted that as far as protective clothing for firefighters, these standards are covered under Article 10 of the GISO; protection of utility workers performing high-voltage electrical work is covered under the High-Voltage Electrical Safety Orders. If electrical workers are performing construction work on the highway, such as setting poles or building lines, the CSO for worker protection would apply.

Response:

The Board states that firefighters are subject to the fall protection standards contained in the GISO which address the use of various fall protection methods and internally reference the reader to the fall protection standards of the CSO. The Board notes the citation that was issued to firefighters under the CSO, as mentioned previously, was dismissed by the Occupational Safety and Health Appeals Board. Therefore, the Board maintains that, absent a specific cross-reference to the CSO or some other provision of the law making a CSO standard applicable to an employer covered by the GISO, the CSO standard does not apply to the GISO-covered employer. The Board continues to assert that the CSO, HVA proposal does not apply to firefighting operations. Therefore, the Board believes no modification of this proposal is necessary.

The Board thanks Captain Duran for his comment and participation in the Board's rulemaking process.

Mr. Bill Turner, Safety Manager, City of Anaheim.

Comment:

Mr. Turner stated that it appears to him that this proposal could be applied to firefighters because the federal DOT standard, mentioned earlier, mentions first responders. Therefore, Mr. Turner asked that firefighters and police be excluded from the proposal.

Response:

See the Board's response to Captain Antonio Duran, Safety Officer, Los Angeles County Fire Department's comment.

Therefore, the Board believes no modification of this proposal is necessary.

The Board thanks Mr. Turner for his comment and participation in the Board's rulemaking process.

Mr. Bill Jackson, OSHSB Member:

Comment:

Mr. Jackson noted that although the Board has adopted standards which incorporate ANSI standards by reference in the past, only specific portions of a referenced consensus standard that applies to the regulation are incorporated by reference.

Response:

The Board responds that Mr. Jackson is correct.

Mr. Willie Washington, OSHSB Member and Larry McCune, Division.

Comment:

Mr. Washington asked the Division which safety orders would apply to flaggers who are performing other duties such as monitoring or directing traffic during an event.

Mr. McCune responded that such situations are not covered by any Title 8 safety order. He stated he would support an exemption statement to be included in Sections 1598 and 1599 to exclude firefighters.

Response:

The Board recognizes that Sections 1598 and 1599 do not apply to any other employer or to employees conducting any operations other than traffic control for construction operations. Therefore, an exception statement is unnecessary, as it is clear to whom the proposal applies. As previously stated, Sections 1598 and 1599 are contained in the CSO and apply to construction industry traffic control and do not apply to fire fighters, emergency medical services, or law enforcement.

Dr. Jonathan Frisch, OSHSB Member and Mr. Bill Jackson, OSHSB Member.

Comment:

Dr. Frisch asked Board staff whether the Manual of Uniform Traffic Control Devices (MUTCD) contains a reference to the proposed HVA standards, or does the MUTCD actually spells them out?

Board staff indicated that the MUTCD contains a reference to the ANSI/ISEA standard just as this proposal does.

Dr. Frisch indicated that he had not read the ANSI/ISEA standard referenced in this proposal and stated he would, therefore, want to see it before voting on the standard at adoption.

Mr. Jackson expressed concern about adopting the referenced ANSI/ISEA standard since this standard addresses issues not covered by the present standard such as headwear, and creates new requirements for HVA during darkness and HVA color schemes. He also indicated that the standard incorporated by reference is lengthy and provides little guidance to the employer as to what HVA is to be worn. Mr. Jackson also stated that for an employer to be able to determine what the HVA selection criteria are, one would have to buy the standard since it is copyrighted and creates legal issues when copies are made and distributed free of charge. He further noted that normally proposals contain specific portions of national consensus standards that are germane to the Title 8 standard.

Response:

The Board staff, in recognition of these concerns expressed by the Board, has modified this proposal as stated earlier to require that HVA labeled as meeting the referenced ANSI/ISEA standard be used and has modified the proposal in both Sections 1598 and 1599 to specifically require the employer to determine and select the proper type of HVA in accordance with either Appendix B of the ANSI/ISEA 107-2004 standard, consulting the HVA manufacturer, or referring to other reputable source of HVA selection information. This proposal will reduce the level of the risk of vehicular contact which has resulted in construction traffic control worker fatalities by ensuring that employees wear HVA that will be effective in providing the necessary visibility according to the traffic control conditions they face.

Mr. Jack Kastorff, OSHSB Member.

Comment:

Mr. Kastorff noted this proposal would eliminate the existing HVA color requirements. It is his understanding that a majority of construction workers wear orange tee-shirts and he asked if the proposal would prohibit orange tee-shirts from being worn.

Response:

The ANSI/ISEA standard describes examples of a portion of the many types of garments that can be worn as compliant with the standard and it does not specifically prohibit the wearing of orange tee shirts. In fact, fluorescent orange is not prohibited. The standard only requires that such garments be reflectorized when worn during night-time activities in accordance with the updated ANSI/ISEA retro-reflectivity standards. The ANSI/ISEA standard referenced in the proposal addresses the types of HVA, colors, durability, material resistance, patterns or configurations of reflective stripes and contrast.

Mr. Steven Rank, OSHSB Member.

Comment:

Mr. Rank stated that in his opinion it is more important for first responders to provide effective first response and not have to worry about donning HVA prior to rendering aid to victims.

Response:

The Board recognizes that the proposal does not apply to emergency medical personnel but to construction industry workers involved in traffic control around construction jobsites where the hazards of vehicular traffic are present.

Chairman John MacLeod, OSHSB.

Comment:

Chairman MacLeod stated that most of the firefighter's concerns relate to the federal U.S. Department of Transportation (DOT) standard, and not the proposed amendments to Title 8. Chairman MacLeod wondered if the proposal would in anyway conflict with the federal standard.

Response:

The amendments to the federal U.S. DOT standard referenced by stakeholders during the public hearing have not been adopted by federal OSHA. Federal OSHA may eventually amend its current traffic control standards and adopt the amended U.S. Department of Transportation MUTCD; however, there is no indication when this will occur. It is not possible to say with certainty whether there will be any conflict with future federal OSHA standards; therefore, Board staff will evaluate the federal final rule after it is promulgated and make a determination.

This proposal is consistent with an update to the California MUTCD which reference the same ANSI/ISEA standard referenced in this proposal. The updated California MCTCD was adopted by the California Department of Transportation in November 2008. Unlike the Federal DOT

standard, the California MUTCD update does not apply to firefighters, law enforcement or EMS personnel. Should there be any discrepancy between state and federal standards over the issue of firefighters, law enforcement or EMS personnel and HVA, it is expected that Board staff will compare the standards and propose necessary amendments for presentation to the Board at a future public hearing to ensure that Title 8 standards are at least as effective as the federal standard per California Labor Code, Section 142.3(a)(2).

MODIFICATIONS AND RESPONSES TO COMMENTS RESULTING FROM  
THE 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 15-Day Notice of Proposed Modifications mailed on March 5, 2009.

Summary and Responses to Comments:

Mr. Ken Nishiyama ATHA, Regional Administrator – Region IX of the Occupational Safety and Health Administration, by letter received on March 24, 2009.

Comment:

As a result of the 15-Day Notice mailed on March 5, 2009, the Occupational Safety and Health Administration, Region IX, has determined that Sections 1598 and 1599 of Article 11 of the Construction Safety Orders is at least as effective as the counterpart federal standard.

Response:

The Board thanks Mr. Nishiyama ATHA for his comment and participation in the rulemaking process.

Mr. Bruce Wick, CALPASC Director of Risk Management, by e-mail transmission received March 25, 2009; Mr. Richard Harris, President of Residential Contractors Association, by facsimile received March 25, 2009; and Mr. Kevin D. Bland, Esq., California Framing Contractors Association, by facsimile received on March 25, 2009.

Comments:

All three comment letters are essentially identical and stated that the proposal requires clarification to allow the employer to make their high visibility apparel (HVA) selection based on either the requirements of the ANSI/ISEA 107-2004, Appendix B or be able to rely upon the manufacturer's recommendations that the selected HVA complies with the aforementioned consensus standard. The commenters suggested adding the phrase "at time of purchase" after the word "labeled" in Sections 1598(c) and 1599(d) to address a situation where the label or tag has been damaged or rendered illegible due to wear.

Response:

The proposal was modified to add a new subsection (e) in Section 1598 and a new subsection (f) in Section 1599 to address a very important issue with regard to the use of personal protective equipment (PPE); PPE selection according to the nature of the hazard(s) the employee will face. The ANSI/ISEA 107-2004 standard addresses the importance of proper HVA selection and provides HVA end users selection guidance in Appendix B which is referenced in both proposed Section 1598(e) and Section 1599(f). Alternatively, Section 1598(5) and Section 1599(f) also allow the end user to consult the HVA manufacturer or any other appropriate source of authoritative selection criteria.

With regard to the labeling issue raised by the commenters, the ANSI/ISEA 107-2004, Chapter 11.1, requires that all HVA be labeled and that the label be durable to withstand successive laundering and cleaning processes. The labeling requirement also specifies the label is to provide the name, trademark or other identification of the manufacturer or authorized representative, in addition to the product designation, size, and that it is ANSI/ISEA 107-2004 compliant and a pictogram showing the HVA performance class. At the time of purchase, sufficient HVA labeling and identification is provided for the employer to maintain a record. The Board notes there are numerous Title 8 safety orders that simply require the employer use PPE, other safety equipment and equipment/machinery that is labeled as meeting a given national consensus standard. Consequently, the suggested additional wording does nothing to enhance the existing level of safety and clarity already provided by the modified proposal and therefore is unnecessary.

The Board thanks Mr. Wick, Mr. Harris, and Mr. Bland for their comments and participation in the rulemaking process.

Mr. Bill Taylor, CSP, Legislative Committee Chairperson, Public Agency Safety Management Associations (PASMA)-South Chapter, by letter dated March 25, 2009.

Comment No. 1:

Mr. Taylor raised the issue of applicability of the Construction Safety Orders (CSO) and Sections 1598 and 1599 to firefighters, law enforcement and emergency medical services personnel and the Board's response to oral and written 45-Day Notice comments in which the Board categorically stated that the CSO and Sections 1598 and 1599 do not apply to those occupations. Mr. Taylor stated that PASMA agrees with the Board's findings and that clarity and transparency are important parts of the rulemaking process. He also stated that clearly written standards will avoid unnecessary and time consuming litigation between the employer and the Division of Occupational Safety and Health in appealing a cited safety order that does not apply.

Response to Comment No. 1:

The Board agrees with Mr. Taylor.

Comment No. 2:

Mr. Taylor stated that with regard to new subsection (e) in Section 1598, the apparel manufacturer may not always be objective in their assessment of what type of HVA the employer should wear. Mr. Taylor stated that many PASMA members have already purchased Class 2 HVA which varies from Class 3 vests in that they are designed with an additional visibility stripe. Mr. Taylor stated that Appendix B of the ANSI/ISEA 107-2004 standard is non-mandatory but would become a mandatory standard by subsection (e) and is concerned that Division compliance personnel would somehow require the employer to upgrade to a Class 3 HVA vest based solely on the compliance officer's interpretation of Appendix B. Mr. Taylor stated that the criteria for determining what type of HVA vest to wear is not clear enough and that the process of making the determination of what type of HVA to wear is a factor of more than just vehicle speed or task loads. Mr. Taylor also stated that language stating "other appropriate sources of information" is vague. Therefore, Mr. Taylor suggested that either an advisory committee be convened or subsection (e) be deleted.

Response to Comment No. 2:

The Appendix B performance guidelines are intended to address the issue of ensuring workers are seen which is critical. The worker must be seen in all work lighting conditions and in complex environmental backgrounds such as high speed traffic, equipment and construction sites and many others. Visibility is critical and the sooner a vehicle operator sees a pedestrian worker, the better for both. The sooner a person in the path of travel is seen, the longer the operator has to avoid the incident. The wearing of ANSI/ISEA 107-2004 compliant HVA will provide dramatically enhanced visibility for construction workers. The ANSI/ISEA 107-2004 now provides performance classes based on worker hazards and tasks, complexity of the work environment or background, and vehicular traffic and speed considerations. Proposed subsection (e) was intended to address a universally important PPE issue; assessment and selection. In the absence of proposed subsection (e), employee's risk of being struck by moving vehicles/equipment can be expected to increase if the employer does not select the appropriate class HVA. Proposed subsection (e) does not require the employer to ascribe to a manufacturer's assessment of what type of HVA to wear; the manufacturer will not provide such an assessment unless they are qualified to do so. Manufacturers are generally available as a source of selection criteria and can help to guide the end user towards a specific class of HVA based on the end users working conditions. Ultimately, it is the end user who must make a site or job specific selection. Alternatively, proposed subsection (e) permits the employer to consult Appendix B, Performance Class Guidelines. The disclaimer to Appendix B clearly states that the guidelines and scenarios described within are to serve as an assessment tool only and that as stated by Mr. Taylor, site-specific conditions which include atmospheric, sight/stop distances, training, regulations, and proximity must be considered. Appendix B also cautions that vehicle speed should not be considered in isolation to these variables.

Proposed subsection (e) also permits the employer to make a selection based on other HVA selection criteria. An excellent alternative source of information would be the California Manual on Uniform Traffic Control Devices (MUTCD) which is already referenced in Sections 1598 and 1599. The American Traffic Safety Services Association (ATSSA) is also another excellent source.

Therefore, the Board believes the proposed subsection (e) is critical to the safety of California workers who need to wear HVA and that this standard is sufficiently and reasonably clear and flexible in providing the guidance and information necessary for employers to select HVA appropriate for their jobsite conditions. Consequently, an advisory committee and further modification to the proposal is unnecessary.

Comment No. 3:

Mr. Taylor stated that he represents agencies that employ meter readers and park maintenance personnel who may be exposed to the hazards of vehicular traffic. Given the scope of the CSO, Mr. Taylor inquired as to whether park maintenance personnel would be subject to the requirements of Sections 1598 and 1599. He stated PASMA's understanding is that meter readers would not be covered although he asks for clarification as to whether meter readers and park maintenance personnel would be covered by Sections 1598 and 1599.

Response to Comment No. 3:

At the August 29, 2008 Public Hearing, there was much discussion and comment regarding applicability of the CSO to other non-construction industry occupations. The Board prefers to not respond to this comment for two reasons: 1). Mr. Taylor's comment does not pertain to specific language proposed for modification and, 2). The issue of applicability was raised in front of the Board and discussed with stakeholders and the Division at the August 29, 2008 Public Hearing. The issue of applicability is an interpretation issue which should be posed by Mr. Taylor to the Division of Occupational Safety and Health, and not the Standards Board, as it is not the Board's responsibility to interpret and enforce Title 8 standards.

The Board thanks Mr. Taylor for his comments and participation in the rulemaking process.

Mr. John Vocke, Attorney, Safety, Health and Claims Department, Pacific Gas and Electric Company (PG & E), by facsimile dated March 24, 2009.

Comment:

Mr. Vocke indicated that he is aware that his comment is outside the scope of the 15-Day Notice of Modifications. Mr. Vocke stated that manufacturers utilize metallic fibers woven into the modacrylic fibers to dissipate static charges. In cases where the employee works in an environment where flammable gas may be present, the employee takes the HVA off to assure

that no static build-up exist which could in theory ignite a flammable gas cloud. Modacrylic HVA vest with static dissipating metallic threads are useful to gas employees but present a conductivity hazard for employees who work in proximity to energized conductors. PG & E believes that two types of HVA may be required; one for gas employees and one for electric employees. To date, HVA technology does not provide a vest that addresses both electric and gas scenarios. Mr. Vocke stated that current research indicates that there is insufficient HVA static build-up to trigger a gas explosion although the data does not account for variations in humidity. Mr. Vocke stated that the HVA industry is years away from resolving this issue as experimentation with different modacrylic acrylic weaves continues and it is both uncertain and unclear as to how these issues will be resolved. Mr. Vocke concluded by suggesting that the Board takes note of this issue when considering the inclusion of the ANSI standard into existing regulation or in future rulemaking on this subject.

Response:

The Board notes Mr. Vocke's comment pertains to potential build-up of static charges on HVA that is composed of what is know as modacrylic material (inherent flame retardancy to the fiber), and that this comment does pertain to any of the modifications specified in this proposal. The Board also notes that the issue of flame retardancy versus static charge build-up for modacrylic materials is apparently the subject of ongoing experimentation. The Board will consider any documentation including any incidents involving static charge-flammable gas ignition (to date there have been none noted) on this subject in future rulemaking involving national consensus standards and HVA. Mr. Vocke may wish to consider petitioning the Board in the future to amend Title 8 should data upon which an amended HVA standard could be developed is available for consideration.

The Board thanks Mr. Vocke for his comment and participation in the Board's rulemaking process.

ADDITIONAL DOCUMENTS RELIED UPON

1. American National Standards Institute (ANSI)/International Safety Equipment Association (ISEA) 107-2004, High Visibility Safety Apparel and Headwear, Sections 1 – 12, and Appendices A, B, and C.
2. Department of Transportation; Traffic Operations Policy Directive; No. 08-07, Date Issued November 21, 2008; Effective November 24, 2008; Pages 1 – 8.

These documents are available for review Monday through Friday from 8:00 a.m. – 4:30 p.m. at the Standards Board's 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 regulation. 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.