HIOSH DIRECTIVE

DIRECTIVE NO.: CPL 02-01-049	EFFECTIVE DATE: September 20, 2011
SUBJECT:	29 CFR Part 1915, Subpart I, Enforcement Guidance for Personal Protective Equipment (PPE) in Shipyard Employment

This CPL is adopted by HIOSH in its entirety.

The only Shipyard employment that HIOSH has jurisdiction over is for public sector employees.

OSHA INSTRUCTION

U.S. DEPARTMENT OF LABOR | Occupational Safety and Health Administration

DIRECTIVE NUMBER: CPL 02-01-049 | **EFFECTIVE DATE: November 4, 2010**

SUBJECT: 29 CFR Part 1915, Subpart I, Enforcement Guidance for Personal Protective Equipment (PPE) in Shipyard Employment

ABSTRACT

Purpose: To provide guidance concerning the application of current enforcement policy and procedures for personal protective equipment (PPE) in shipyard employment. Also, to ensure consistent enforcement of 29 CFR Part 1915, Subpart I, PPE including PPE payment for shipyard employment activities.

Scope: OSHA-wide.

References: See paragraph V.

Cancellations: STD 02-04-002, *29 CFR Part 1915, Subpart I, Personal Protective Equipment (PPE) for Shipyard Employment – Inspection Procedures and Interpretive Guidelines*, September 27, 1996.

State Impact: State notice of intent and equivalency required; See paragraph VII.

Action Offices: National, Regional, and Area Offices; Consultation Project Managers.

Originating Office: Directorate of Enforcement Programs (DEP).

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By and Under the Authority of

David Michaels, PhD, MPH
Assistant Secretary

Executive Summary

This instruction provides guidance to Occupational Safety and Health Administration (OSHA) national, regional and area offices, and State Plan programs and federal agencies concerning OSHA's policy and procedures for implementing inspection programs to reduce injuries, illnesses and fatalities, and eliminate workplace hazards in shipyard employment through the use of personal protective equipment (PPE).

OSHA revised the shipyard employment safety standards addressing PPE in 1996 (61 F.R. 26321). The revised standards updated, reorganized and simplified shipyard employment PPE standards into a comprehensive framework that encompasses the ship repair, shipbuilding and shipbreaking industries. These 29 CFR Part 1915, Subpart I, PPE standards apply to all work in shipyard employment regardless of geographical location, but do not apply to construction operations in shipyards covered by 29 CFR Part 1926. On November 15, 2007, OSHA issued a final rule for *Employer Payment for Personal Protective Equipment* (72 F.R. 64341-64430) that applies identical rules to all industries regarding payment for PPE, including shipyard employment (29 CFR Part 1915). On September 9, 2009, OSHA issued a final rule, *Updating OSHA Standards Based on National Consensus Standards; Personal Protective Equipment* (74 F.R. 46350-46351), that applies to all industries.

This instruction provides information and enforcement guidance to support OSHA's inspection efforts in shipyard employment and:

- Supports *DOL's Strategic Plan* Outcome Goal for increased emphasis on reducing workplace injuries, illnesses and fatalities.
- Provides OSHA compliance officers with information about PPE selection and use in shipyard employment and in minimizing employee exposure to hazards.
- Supports the *National Emphasis Program (NEP) on Shipbreaking*, and the *Site-Specific Targeting (SST) Program* for the shipbuilding and ship repairing industries.

Significant Changes

This instruction has been revised and updated to include the following significant changes:

- Clarifies the PPE that employers must provide at no cost to their employees, when employers must pay for replacement PPE, and when employers are not required to pay for PPE.
- Clarifies the PPE payment requirements for PPE worn off the job site, for PPE that must remain at the job site, and for employee-owned PPE.
- Provides updates to consensus standards that were issued after the PPE for shipyard employment final rule (November 15, 2007) to recognize more recent editions of industry standards that PPE must meet as published in 74 F.R. 46350-46361 (September 9, 2009).
- Sets forth enforcement policies to reflect court decisions concerning PPE.
- Updates references and directives to include new documents and the current version of documents previously listed.
- Delivers available shipyard PPE safety and health information in a web-based format with electronic links to noted references.

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I. Purpose.

This instruction, *29 CFR Part 1915, Subpart I, Enforcement Guidance for Personal Protective Equipment (PPE) in Shipyard Employment*, has been developed to provide enforcement guidance related to PPE and to assist CSHOs in conducting inspections.

II. Scope.

This instruction applies OSHA-wide.

III. Cancellation.

This instruction cancels OSHA Instruction STD 02-04-002, *29 CFR 1915, Subpart I, Personal Protective Equipment (PPE) for Shipyard Employment – Inspection Procedures and Interpretive Guidelines*, September 27, 1996.

IV. Significant Changes.

This instruction has been revised and updated to include significant changes as follows:

- Clarifies the PPE that employers must provide at no cost to their employees, when employers must pay for replacement PPE, and when employers are not required to pay for PPE.
- Clarifies the PPE payment requirements for PPE worn off the job site, for PPE that must remain at the job site, and for employee-owned PPE.
- Provides updates to consensus standards that were issued after the PPE for shipyard employment final rule (November 15, 2007) to recognize more recent editions of industry standards that PPE must meet as published in 74 F.R. 46350-46361 (September 9, 2009).
- Sets forth enforcement policies to reflect court decisions concerning PPE.
- Updates references and directives to include new documents and the current version of documents previously listed.

V. References.

A. 29 CFR Part 1910, General Industry Standards.

B. 29 CFR Part 1915, Shipyard Employment Standards.

C. 29 CFR Part 1926, Construction Standards.

D. 29 CFR Part 1960, Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters.

E. Department of Labor 2010-2016 Strategic Plan, Department of Labor Strategic Plan for Fiscal Years 2010-2016.

F. 53 F.R. 48092, Shipyard Employment Safety Standards, November 29, 1988.

G. 54 F.R. 33832, Personal Protective Equipment for General Industry; Proposed Rule, August 16, 1989.

H. 55 F.R. 13360, Walking and Working Surfaces, Personal Protective Equipment (Fall Protection Systems); Notice of Proposed Rulemaking; Slips; Falls; Trips, April 10, 1990.

I. 59 F.R. 16334, Personal Protective Equipment for General Industry, April 6, 1994.

J. 59 F.R. 34586, Personal Protective Equipment for Shipyard Employment, July 6, 1994.

K. 59 F.R. 64173, Personal Protective Equipment for Shipyard Employment, December 13, 1994.

L. 61 F.R. 26321, Personal Protective Equipment for Shipyard Employment; Final Rule, August 22, 1996.

M. 63 F.R. 1152, 29 CFR Parts 1910 and 1926, Respiratory Protection; Final Rule, January 8, 1998.

N. 72 F.R. 64341-64430, Employer Payment for Personal Protective Equipment; Final Rule, November 15, 2007.

O. 74 F.R. 46350-46361, Updating OSHA Standards Based on National Consensus Standards; Personal Protective Equipment, September 9, 2009.

P. 75 F.R. 28861-29153, Walking Working Surfaces and Personal Protective Equipment (Fall Protection Systems), Notice of Proposed Rulemaking, May 24, 2010

Q. Occupational Safety and Health Act of 1970 (29 U.S.C. §654(a)(1-2)).

R. OSHA Publication 3151-12R-2003, Personal Protective Equipment.

S. OSHA Directives.

- OSHA Instruction CPL 02-00-148, OSHA Field Operations Manual (FOM), November 9, 2009.

- OSHA Instruction CPL 02-00-136, OSHA's National Emphasis Program (NEP) on Shipbreaking, March 16, 2005.

- OSHA Instruction CPL 02-00-111, Citation Policy for Paperwork and Written Program Requirement Violations, November 27, 1995.

- OSHA Instruction CPL 02-00-120, Inspection Procedures for the Respiratory Protection Standard, September 25, 1998.

- OSHA Instruction CPL 02-00-142, Shipyard Employment "Tool Bag" Directive, August 3, 2006.

- OSHA Notice CPL 09-05 (CPL 02), Site-Specific Targeting 2009 (SST-09), July 20, 2009.

VI. Expiration Date.

This instruction will remain in effect until canceled or superseded by instruction or notice.

VII. Federal Program Change – Notice of Intent and Equivalency Required.

This instruction which provides guidance for the enforcement of standards applicable to personal protective equipment (PPE) in shipyard employment, including guidance on payment for PPE, describes a federal program change for which notice of intent and equivalency are required . States with OSHA-approved State Plans that cover private sector shipyard employment activities, as well as those with public sector employees engaged in these activities, are expected to have implementing enforcement policies and procedures in place for their PPE in shipyard employment standards which are at least as effective as those in this instruction. All States with OSHA-approved State Plans cover public sector, State and local government employees, including any public employees that may be engaged in maritime activities; only California, Minnesota, Vermont and Washington cover private sector shore-side operations for shipyard employment and marine terminals. (See 29 CFR 1952, *Approved State Plans for Enforcement of State Standards.)*

States with private or public sector shipyard employees within their jurisdiction are required to notify OSHA within 60 days whether they intend to adopt policies and procedures identical to those in this instruction or adopt or maintain different policies and procedures. States without any private or public sector shipyard employment should so indicate in their response.

If a State adopts or maintains policies and procedures that differ from federal policies and procedures, , the State must identify the differences and may either post its policy on its website and provide the link to OSHA or submit an electronic copy to OSHA with information on how the public may obtain a copy. If a State adopts policies and procedures that are identical to federal policies and procedures, the State must provide the date of adoption to OSHA. State adoption must be accomplished within 6 months, with

posting or submission of documentation within 60 days of adoption. OSHA will post summary information on the State Plan response to this instruction on its website.

States were required to adopt standards at least as effective as OSHA's PPE Payment standards, including the Shipyard provisions at 29 CFR 1915.152(f)(1)-(f)(7), by May 15, 2008.

VIII. Action Information.

A. Responsible Office.
Directorate of Enforcement Programs (DEP), Office of Maritime Enforcement (OME).

B. Action Offices.
National, Regional, and Area Offices; Consultation Project Managers; and State Plan States.

C. Information Offices.
None.

IX. Actions Required.

The policies and procedures set forth in this instruction are effective immediately and will remain in effect until canceled by proper authority. OSHA Regional Administrators, Area Directors and National Office Directors must ensure that the policies and procedures set forth in this instruction are followed. Regional Administrators also must ensure that State Plan State Designees and Consultation Program Managers in their regions are informed of the requirements of this instruction and encourage the involvement of Consultation Programs in shipyard employment.

X. Federal Agencies.

This instruction describes a change that may affect federal agencies. It is the responsibility of the head of each federal agency to establish and maintain an effective and comprehensive safety and health program. Executive Order 12196, Section 1-201 and 29 CFR 1960.16 require federal agencies to adopt policies and procedures necessary to provide a level of protection equivalent to that provided by OSHA standards and regulations.

XI. Definitions.

A. *Anchorage*: A secure point of attachment for lifelines, lanyards, or deceleration devices (29 CFR 1915.151(b)).

B. *Body Belt*: A strap with means for both securing it about the waist and attaching it to a lanyard, lifeline, or deceleration device (29 CFR 1915.151(b)).

NOTE: Since January 1, 1998, body belts (see 1915.159(b)(6)(i)) cannot be used with a personal fall arrest system in shipyard employment. However, the use of a body belt in a positioning device system or restraint (horizontal tether) device is acceptable (29 CFR 1915.159).

C. *Body Harness*: Straps which may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, shoulders, chest and pelvis with means for attaching it to other components of a personal fall arrest system (29 CFR 1915.151(b)).

D. *Connector*: A device which is used to couple (connect) parts of a personal fall arrest system or parts of a positioning device system together. It may be an independent component of the system, such as a carabineer, or it may be an integral component of part of the system (such as a buckle or D-ring sewn into a body belt or body harness or a snaphook spliced or sewn to a lanyard or self-retracting lanyard) (29 CFR 1915.151(b)).

E. *Deceleration Device*: Any mechanism, such as a rope grab, ripstitch lanyard, specially woven lanyard, tearing or deforming lanyard, or automatic self-retracting lifeline/lanyard, which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on an employee during fall arrest (29 CFR 1915.151(b)).

F. *Deceleration Distance*: The additional vertical distance a falling employee travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an employee's body belt or body harness attachment point at the moment of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop (29 CFR 1915.151(b)).

G. *Equivalent*: Alternative designs, materials, or methods to protect against a hazard which the employer can demonstrate will provide an equal or greater degree of safety for employees than the method or item specified in the standard (29 CFR 1915.151(b)).

H. *Free Fall*: The act of falling before a personal fall arrest system begins to apply force to arrest the fall (29 CFR 1915.151(b)).

I. *Free Fall Distance*: The vertical displacement of the fall arrest attachment point on the employee's body belt or body harness between onset of the fall and just before the system begins to apply force to arrest the fall. This distance excludes deceleration distance and lifeline/lanyard elongation, but includes any deceleration device slide distance or self-retracting lifeline/lanyard extension before the device operates and fall arrest forces occur (29 CFR 1915.151(b)).

J. *Lanyard*: A flexible line of rope, wire rope, or strap which generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline, or anchorage (29 CFR 1915.151(b)).

K. *Lifeline*: A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage (29 CFR 1915.151(b)).

L. *Lower Levels*: Those areas or surfaces to which an employee can fall. Such areas or surfaces include, but are not limited to, ground levels, floors, ramps, tanks, materials, water, excavations, pits, vessels, structures, or portions thereof (29 CFR 1915.151(b)).

M. *Personal Fall Arrest System*: A system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, body belt or body harness and may include a lanyard, a deceleration device, a lifeline, or a suitable combination of these (29 CFR 1915.151(b)).

NOTE: Since January 1, 1998, body belts (see 1915.159(b)(6)(i)) cannot be used with a personal fall arrest system in shipyard.

N. *Positioning Device System*: A body belt or body harness system rigged to allow an employee to be supported at an elevated vertical surface, such as a wall or window, and to be able to work with both hands free while leaning (29 CFR 1915.151(b)).

O. *Qualified Person*: A person who by possession of a recognized degree or certificate of professional standing, or who, by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems related to the subject matter and work (29 CFR 1915.151(b)).

P. *Restraint (Tether) Line*: A line from an anchorage, or between anchorages, to which the employee is secured in such a way as to prevent the employee from walking or falling off an elevated work surface. A restraint line is not necessarily designed to withstand forces resulting from a fall (29 CFR 1915.151(b)).

Q. *Rope Grab*: A deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle of inertial locking, cam/level locking or both (29 CFR 1915.151(b)).

R. *Shipyard Employment*: Ship repairing, shipbuilding, shipbreaking and related employments (29 CFR 1915.4(i)).

S. *Ship Repair*: Any repair of a vessel including, but not restricted to, alterations, conversions, installations, cleaning, painting, and maintenance work (29 CFR 1915.4(j)).

T. *Shipbuilding*: The construction of a vessel including the installation of machinery and equipment (29 CFR 1915.4(k)).

U. *Shipbreaking*: Any breaking down of a vessel's structure for the purpose of scrapping the vessel, including the removal of gear, equipment or any component part of a vessel (29 CFR 1915.4(l)).

V. *Vessel*: Includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, including special purpose floating structures not primarily designed for or used as a means of transportation on water (29 CFR 1915.4(f)).

XII. Application.

This instruction applies OSHA-wide to all interventions, inspections and violation abatement assistance involving shipyard employment activities. This instruction also applies to OSHA outreach efforts that include compliance assistance, cooperative programs, training and education.

Further, this instruction applies to all State consultation programs with jurisdiction over private sector, shore-side shipyard employment activities (States of California, Minnesota, Vermont and Washington). State consultation programs are expected to provide safety and health program assistance, training, education, hazard identification and abatement assistance to employers.

Comprehensive guidance for OSHA offices to establish or support intervention and inspection programs in the shipyard employment industry, including 29 CFR 1915 Subpart I, is provided in CPL 02-00-142, *Shipyard Employment "Tool Bag" Directive*.

XIII. Background.

The OSHA standards for PPE were included in OSHA's shipyard employment standards and in applicable provisions from the general industry and construction standards that address hazards or conditions not covered by shipyard employment standards. The original PPE standards were adopted in 1971, from established federal standards and national consensus standards. The ship repair, shipbuilding and shipbreaking standards were consolidated into 29 CFR Part 1915 in 1982. However, this consolidation did not alter the substantive requirements of these standards nor affect the applicability of the 29 CFR Parts 1910 and 1926 to shipyard employment hazards or conditions that were not addressed in Part 1915.

In 1988, OSHA published a Notice of Proposed Rulemaking (NPRM) in the Federal Register (53 F.R. 48092, November 29, 1988) for Subpart I of Part 1915, *Personal*

Protective Equipment (PPE). This proposed rule updated the pertinent references to national consensus standards, incorporated 1910.134 (respiratory protection) by reference to replace the less comprehensive provisions in 1915.152, and added requirements for hazard assessment, training, fall protection systems and positioning device systems. The Shipyard Employment Standards Advisory Committee (SESAC) was established in early 1989, and provided OSHA with comments on the proposed PPE standard and other applicable PPE-related issues.

Following publication of the proposed Part 1915 Shipyard PPE standard, OSHA initiated two rulemakings to address PPE standards in general industry. The first of these PPE rulemakings was proposed on August 16, 1989 (54 F.R. 33832) and covered eye, face, hand and foot PPE. The Agency published the final standards for this rulemaking on April 6, 1994 (59 F.R. 16334). The second PPE rulemaking proposed to add requirements for personal fall arrest systems and positioning device systems to the general industry PPE standards (Docket S-057; NPRM at 55 F.R. 13360, April 10, 1990). This second general industry PPE rulemaking remains in process.

The Agency determined that the information in the above noted rulemaking records were relevant to the issues raised in the shipyard employment PPE proposal. Accordingly, on July 6, 1994, OSHA reopened the shipyard employment PPE rulemaking record (59 F.R. 34586) to incorporate the general industry PPE docket and to allow an opportunity for the public to comment. The comment period for the shipyard employment PPE reopening ended August 22, 1994. In lieu of a hearing, OSHA held an informal public meeting on January 25, 1995 (59 F.R. 64173) to allow comments and testimony on the aforementioned rulemakings with emphasis on hazard assessment, certification of training requirements, body belts and body harnesses. This rulemaking record closed on February 18, 1995.

The final shipyard employment PPE rule, published on May 24, 1996, became effective August 22, 1996, except for 1915.159(b)(6) and 1915.160(b)(2), which became effective November 20, 1996, and for the introductory text of 1915.159 and 1915.160(a)(4), which became effective on January 1, 1998 (61 F.R. 26322). In addition, applicable paperwork requirements were approved under OMB control number 1218-0215. The revised shipyard employment PPE standards provided guidance for the selection and use of PPE as well as clearer requirements that are performance-oriented, where appropriate.

On November 15, 2007, OSHA issued a final rule for *Employer Payment for Personal Protective Equipment* (72 F.R. 64341-64430) that provides identical rules to all industries regarding payment for PPE, including shipyard employment.

On September 9, 2009, OSHA issued a final rule (74 F.R. 46350-46361) to revise the PPE sections of its general industry, shipyard employment, longshoring and marine terminals standards regarding requirements for eye- and face-protective devices, head protection and foot protection. This revision updated the references in OSHA's regulations to recognize more recent editions of the applicable national consensus standards and requires safety equipment to comply with the applicable PPE design provisions.

XIV. Inspection Guidelines for Shipyard Employment.

The compliance safety and health officer (CSHO) shall determine whether the employer is in compliance with the 29 CFR Part 1915, Subpart I, PPE requirements (1915.152 through 1915.160), other standards applicable to shipyard employment that require PPE (See NOTE, below), and with the final rule for *Employer Payment for Personal Protective Equipment* dated November 15, 2007 (February 13, 2008 effective date).

NOTE: The following are some of the standards applicable to shipyard employment that contain provisions requiring PPE. For specific applicability of 29 CFR 1910 standards to shipyard employment, reference *Appendix A of the Shipyard Employment "Tool Bag" Directive*.

Shipyard Employment Standards

- 1915.12 Precautions and the order of testing before entering confined and enclosed spaces and other dangerous atmospheres.
- 1915.13 Cleaning and other cold work.
- 1915.32 Toxic cleaning solvents.
- 1915.33 Chemical paint and preservative removers.
- 1915.34 Mechanical paint removers.
- 1915.35 Painting.
- 1915.51 Ventilation and protection in welding, cutting and heating.
- 1915.53 Welding, cutting and heating in way of preservative coatings.
- 1915.71 Scaffolds or staging.
- 1915.73 Guarding of deck openings and edges.
- 1915.77 Working surfaces.
- 1915.97 Health and sanitation.
- 1915.134 Abrasive wheels.
- 1915.135 Powder actuated fastening tools.
- 1915.152 General requirements.
- 1915.153 Eye and face protection.
- 1915.155 Head protection.
- 1915.156 Foot protection.
- 1915.157 Hand and body protection.
- 1915.158 Lifesaving equipment.
- 1915.159 Personal fall arrest systems (PFAS).
- 1915.160 Positioning device systems.
- 1915.504 Fire watches.
- 1915.505 Fire response.
- 1915.507 Land-side fire protection systems.
- 1915.508 Training.
- 1915.1001 Asbestos.
- 1915.1026 Chromium (VI).

General Industry Standards

- 1910.66 Powered platforms for building maintenance.

- 1910.67 Vehicle-mounted elevating and rotating work platforms.
- 1910.94 Ventilation.
- 1910.95 Occupational noise exposure.
- 1910.119 Process safety management of highly hazardous chemicals.
- 1910.120 Hazardous waste operations and emergency response.
- 1910.134 Respiratory protection.
- 1910.183 Helicopters.
- 1910.218 Forging machines.
- 1910.242 Hand and portable powered tools and equipment, general.
- 1910.243 Guarding of portable powered tools.
- 1910.252 General requirements (for welding, cutting and brazing).
- 1910.265 Sawmills.
- 1910.269 Electric power generation, transmission, and distribution.
- 1910.333 Selection and use of work practices (electrical).
- 1910.335 Safeguards for personnel protection (electrical).
- 1910.1003 13 Carcinogens (4-Nitrobiphenyl, etc.).
- 1910.1017 Vinyl chloride.
- 1910.1018 Inorganic arsenic.
- 1910.1025 Lead.
- 1910.1027 Cadmium.
- 1910.1028 Benzene.
- 1910.1029 Coke oven emissions.
- 1910.1030 Bloodborne pathogens.
- 1910.1044 1,2-dibromo-3-chloropropane.
- 1910.1045 Acrylonitrile.
- 1910.1047 Ethylene oxide.
- 1910.1048 Formaldehyde.
- 1910.1050 Methylenedianiline.
- 1910.1051 1,3-Butadiene.
- 1910.1052 Methylene Chloride.
- 1910.1096 Ionizing radiation.
- 1910.1450 Occupational exposure to hazardous chemicals in laboratories.

The guidance and information in this instruction provides a general framework to assist the CSHO during inspections of workplaces involving shipyard employment PPE.

A. **1915.151 Scope, application, and definitions**.

This subpart applies to all work in shipyard employment (shipbuilding, ship repair, shipbreaking, and related employments), regardless of geographic location.

Standards specifically applicable to a condition, practice, means, method, operation, or process shall prevail over any general standard which might otherwise be applicable. However, general standards also may apply according to their terms to any employment and place of employment in any industry.

NOTE: Construction activities at a shipyard location, such as the erection of building structures, are covered by the construction standards (29 CFR Part 1926) and are not subject to the requirements of the shipyard employment standards (29 CFR Part 1915).

Paragraph 1915.151(b) defines the terms used in the shipyard PPE standard. The definitions were updated in 1996 to include a number of terms and definitions that OSHA has used, or proposed to use, in other standards that address fall protection PPE. As noted earlier, the terms and definitions in 1915.151(b) from 61 F.R. 26321, *Personal Protective Equipment for Shipyard Employment; Final Rule*, May 24, 1996 are:

- Anchorage
- Connector
- Deceleration device
- Deceleration distance
- Equivalent
- Free fall
- Free fall distance
- Lanyard
- Lifeline
- Lower levels
- Personal fall arrest system
- Positioning device system
- Qualified person
- Rope grab

B. **1915.152 General requirements**.

Inspections of workplaces subject to the revised PPE standards shall be conducted by CSHOs in accordance with OSHA Instruction CPL 02-00-148, *OSHA Field Operations Manual (FOM)*, November 9, 2009.

1. The CSHO shall verify that the employer has conducted a workplace hazard assessment to determine if there are hazards present, or likely to be present, which require employees' use of PPE. In addition, the employer must have documentation that contains the following information: occupation, the date(s) of the hazard assessment, and the name of the person performing the hazard assessment. In the preamble to the 1996 shipyard employment PPE rulemaking, the Agency chose to use the term "document" rather than the term "certification" as required per Part 1910 to describe these minimal record requirements of 1915.152(b)(4). Enforcement of non-compliance with the requirements of 1915.152(b) will be in accordance with CPL 02-00-111 (CPL 2.111), *Citation Policy for Paperwork and Written Program Requirement Violations*, November 27, 1995, Paragraph G.3.

An employer may rely upon a hazard assessment conducted for the trade or occupation of affected employees if the assessment addresses all PPE-related hazards to which employees are exposed in the course of their work activities. Non-mandatory *Appendix A of 29 CFR Part 1915, Subpart I* provides examples of procedures that will comply with the hazard assessment requirement.

The CSHO should determine whether the employer performed a reassessment based on changes in the workplace or work practices, such as those associated with the installation of new equipment and the lessons learned from reviewing accident records, and a reevaluation performed to determine the suitability of PPE selected for use. To have continuing relevance and validity, it should be conducted at "intervals" and on a schedule dictated by the risks in the workplace. However, the standard does not explicitly require the employer to review the hazard assessment on any periodic basis.

2. The CSHO shall determine if the employer:

   a. Has assessed its work activity to determine if hazards are present and has selected and is having each affected employee use the types of PPE that will protect the employee from identified hazards (1915.152(a) and (b));

   b. Has communicated selection decisions to each affected employee (1915.152(b)(2));

   c. Has selected PPE that properly fits each affected employee (1915.152(b)(3)); and

   d. Has documented the date(s) of the hazard assessment, the occupation that was assessed for hazards, and the name of the person performing the hazard assessment (1915.152(b)(4)).

3. The CSHO shall determine if affected employees are using defective or damaged PPE. Employers are required to ensure that defective or damaged PPE is not used by their employees (1915.152(c)).

4. The CSHO shall ensure that all unsanitary PPE is cleaned and disinfected before it is reissued. Employers are required to ensure that PPE has been cleaned and disinfected before being reissued to employees (1915.152(d)).

5. The CSHO shall evaluate the employer's training program, 1915.152(e)(1), to determine whether the program meets the revised PPE standard's requirements. The CSHO shall determine the effectiveness of training by verifying (e.g., interviews, PPE demonstrations) that employees know at least the following:

   a. When PPE is necessary;

b. What PPE is necessary;

c. How to properly don (put on), doff (take off), adjust and wear PPE;

d. The limitations of the PPE; and

e. The proper care, maintenance, useful life and disposal of the PPE.

NOTE: An employer may rely upon training conforming to 29 CFR 1915.152(e)(1) that a previous employer had provided an employee, or upon the knowledge and ability to use the PPE properly that an employee can demonstrate to have gained through his or her prior experience, in determining if an employee has the requisite knowledge and skill. (See preamble to 61 F.R. 26321, Personal Protective Equipment for Shipyard Employment; Final Rule, August 22, 1996).

6. The CSHO shall assess (e.g., by interviews, PPE demonstrations) whether each affected employee has the knowledge and ability to use PPE properly before being allowed to perform work which requires the use of PPE, pursuant to 1915.152(e)(2). The Agency does not prescribe the means by which employers comply with this provision.

7. The CSHO shall evaluate the possible necessity for an employer to retrain the affected employee (1915.152(e)(3)) by considering if there has been:

   a. Changes in occupation or work that render previous training obsolete; or

   b. Changes in the types of PPE to be used that render previous training obsolete; or

   c. Inadequacies in an employee's knowledge or use of assigned PPE indicating that the employee has not retained the requisite understanding or skill.

8. The CSHO shall verify that each affected employee has received the required training through documentation that includes: Employee(s) name, the date(s) of training, and the type of training the employee(s) received (1915.152(e)(4)).

   a. If the employer relies upon training provided by another employer to an employee prior to this standard's effective date, or relies upon the knowledge and ability gained by an employee through his/her experience, then the document may contain the date that the employer determined that the prior training or the employee knowledge and ability were adequate, rather than the date of the actual training.

   b. Most shipyard employers document training in the form of a log, computer database, or some type of written document. Examples of acceptable documentation could include records of stand-up safety meetings and tool box meetings, or a tool room log (where an employee has checked out PPE such as

safety glasses, hard hats, gloves, or face shields). Any form or format that effectively communicates the required information is acceptable for documentation purposes.

C. **1915.153 Eye and face protection**.

Where such protection is necessary, CSHOs shall verify whether employers provide their affected employees with eye and face protection as required by 29 CFR 1915.152 and .153. The employer must ensure that each affected employee uses protective eye and face wear that fits properly and protects against specific workplace hazards. In addition, the employer should ensure that the protective eye and face wear is reasonably comfortable, provides unrestricted vision and movement, is durable and clean, and provides unrestricted functioning of any other required PPE. For additional information on eye and face protection, see OSHA Publication 3151-12R-2003, *Personal Protective Equipment.*

1. The standard requires that each affected employee shall use appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acid or caustic liquids, chemical gases or vapors, or potentially injurious light radiation (1915.153(a)(1)).

2. Front and side eye protection must be used when there is a hazard from flying objects. Detachable side protectors (e.g., clip-on or slide-on shields) meeting the pertinent requirements of this section are acceptable (1915.153(a)(2)).

3. The standard requires that each affected employee who wears prescription lenses while engaged in operations that involve eye hazards must wear eye protection that incorporates the prescription in its design, or protection that can be worn over the prescription lenses without disturbing the proper position of either the PPE or the prescription lenses (1915.153(a)(3)).

4. When employees use equipment with filter lenses, the lenses must have a shade number appropriate for the work being performed for protection from injurious light radiation (1915.153(a)(4)). See 1915.153, Table I-1, *Filter Lenses for Protection Against Radiant Energy,* which lists the necessary shade numbers for various operations.

   NOTE: When goggle and helmet lenses are worn together, the shade value of the goggle and helmet lenses can be summed to satisfy the shade requirements of 1915.153, Table I-1.

5. Protective eye and face devices must comply with any of the following consensus standards (1915.153(b)(1)):

   a. ANSI Z87.1-2003, *American National Standard Practice for Occupational and Educational Eye and Face Protection* (1915.153(b)(1)(i)); or

b. ANSI Z87.1-1989 (R-1998), *American National Standard Practice for Occupational and Educational Eye and Face Protection* (1915.153(b)(1)(ii)); or

c. ANSI Z87.1-1989, *American National Standard Practice for Occupational and Educational Eye and Face Protection* (1915.153(b)(1)(iii)).

NOTE: Eye and face protective devices that the employer demonstrates are at least as effective as eye and face protection devices that are constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section (1915.153(b)(2)).

6. The CSHO should use OSHA Publication 3151-12R-2003, *Personal Protective Equipment,* as a reference aid. The following are some examples of eye protection:

- **Safety spectacles or glasses** have safety frames constructed of metal or plastic and impact-resistant lenses. Permanent or detachable side protection is available on some models.

  NOTE: Side protection is required when there is a hazard from flying objects.

- **Detachable side protectors** (e.g., clip-on or slide-on side shields) may be permitted as long as they meet the criteria specified in ANSI Z87.1-1989 (29 CFR 1915.153(a)(2)).

  NOTE: Detachable side protectors meeting the criteria of ANSI Z87.1-1989 (R-1998) and ANSI Z87.1-2003 are also acceptable.

- **Goggles** are tight-fitting eye protection that completely covers the eyes, eye sockets and the facial area immediately surrounding the eyes. They provide protection from impact, dust and splashes. Some goggles will fit over corrective lenses.

- **Face shields** are transparent sheets of plastic extending from the eyebrows to below the chin and across the entire width of the employee's head. Some are polarized for glare protection. Screen-type face shields are used around molten metal operations. Face shields protect eyes from small particles and potential splashes or sprays of hazardous liquids but will not provide adequate protection against impact hazards.

  NOTE: Face shields shall be used only in conjunction with spectacles or goggles, providing a higher level of protection to the employees face and eyes; ANSI Z87.1-2003, *American National Standard Practice for Occupational and Educational Eye and Face Protection.*

- **Welding shields** are constructed of vulcanized fiber or fiberglass and can be fitted with a filtered lens. Welding shields protect eyes from burns caused by infrared or intense radiant light; they also protect both the eyes and face from flying sparks, metal spatter, and slag chips produced during welding, brazing, soldering, and cutting operations. OSHA requires filter lenses to have a shade number appropriate to protect against harmful light radiation. For additional information on filtered lenses, see Table I-1 at 29 CFR 1915.153.

- **Laser safety goggles** are specialty goggles that protect against intense concentrations of light produced by lasers. Laser safety goggles should protect for the specific wavelength of the laser and must be of sufficient optical density for the energy involved. Safety goggles intended for use with laser beams must be labeled with the laser wavelengths for which they are intended to be used, the optical density of those wavelengths, and the visible light transmission. The type of laser safety goggles chosen by the employer will depend upon the equipment and operating conditions in the workplace.

D. **1915.154 Respiratory protection**.

Determine compliance using **29 CFR 1910.134** requirements.

1. The 1910.134 standard applies to respirator use where respirators are being worn to protect employees from exposure to air contaminants above an exposure limit or are otherwise necessary to protect employee health, and where respirators are otherwise required to be worn by the employee. The standard requires employers to have a written respiratory protection program that includes procedures for: respirator selection, use, fit testing, and cleaning, maintenance and repair; training in respirator use and respiratory hazards; medical evaluations of employees required to use respirators; procedures for ensuring adequate breathing air; and for evaluating the respiratory protection program's effectiveness.

2. Where respirators are voluntarily worn by employees for comfort or other reasons, the employer must provide such employees with the information contained in Appendix D of 1910.134 ("Information for Employees Using Respirators When Not Required Under the Standard"). In addition, the employer must establish and implement those parts of a written respiratory protection program necessary to ensure that the employee using a respirator voluntarily is medically able to use that respirator, and that it is cleaned, stored, and maintained so as not to present a health hazard to the user.

   NOTE: Employers need not include in the written respiratory protection program those employees whose only use of respirators involves the voluntary use of filtering facepieces (dust masks).

   NOTE: On January 8, 1998, OSHA published a final standard (63 F.R. 1152) on respiratory protection, 1910.134, which covers general industry, construction, shipyard, longshoring, and marine terminal workplaces.

3. The requirement for employers to conduct engineering and work practice controls is enforced in several substance-specific standards (e.g., the asbestos standard at 1915.1001(g)). CSHOs shall cite the respirator provisions of substance-specific Part 1915 standards when those standards apply (e.g., the asbestos standard at 1915.1001(h)). Cite 1910.134(a)(2) when the substance is listed in Table Z of 1915.1000. The requirement for employers to provide respirators is found in several substance-specific Part 1910 standards (e.g., the lead standard at 1910.1025(e) and (f)). CSHOs shall cite the respirator provisions of substance-specific standards when those standards apply. Cite 1910.134(a)(2) when the substance is listed only in Table Z of 1910.1000. Respirator violations are normally grouped with the overexposure to substances regulated by other standards.

4. The employer must provide the right type of respirator for the substance and level of exposure involved. Respiratory protection equipment includes: filtering face pieces (dust masks) and other air-purifying respirators; atmosphere-supplying respirators, including supplied-air respirators and self-contained breathing apparatus; and escape-only respirators. Issue citations under 1910.134(d) for not providing an appropriate respirator, unless a substance-specific standard applies. For complete enforcement guidance on respiratory protection, see CPL 02-00-120, *Inspection Procedures for the Respiratory Protection Program* and CPL 02-00-148, *Field Operations Manual.*

E. **1915.155 Head protection**.

CSHOs shall determine compliance with head protection requirements using 29 CFR 1915.155. Employers must require employees to wear a protective helmet or hard hat when working in areas where there is potential for injury to the head from falling objects (1915.155(a)(1)). A protective helmet designed to reduce electrical shock hazards must be worn by employees where there is potential for electric shock or burns due to contact with exposed electrical conductors which could contact the head (1915.155(a)(2)). In general, hard hats or protective helmets should resist penetration by objects, absorb the shock of a blow, be water-resistant, and have slow-burning properties. Manufacturers' instructions explaining proper adjustment and replacement of the suspension and headband should be followed. Employers should replace protective helmets and their suspension systems when damaged or deteriorated, and at intervals specified by the manufacturer. For additional information on head protection, see OSHA Publication 3151-12R-2003, *Personal Protective Equipment* and ANSI Z89.1-2003, *American National Standard for Industrial Head* ***Protection.***

1. Head protection must comply with any of the following consensus standards (1915.155(b)(1)):

   a. ANSI Z89.1-2003, *American National Standard for Industrial Head Protection* (1915.155(b)(1)(i)); or

b. ANSI Z89.1-1997, *American National Standard for Industrial Head Protection* (1915.155(b)(1)(ii)); or

c. ANSI Z89.1-1986, *American National Standard for Personnel Protection - Protective Headwear for Industrial Workers - Requirements* (1915.155(b)(1)(iii)).

NOTE: Head protection devices that the employer demonstrates are at least as effective as head protection devices that are constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section (1915.155(b)(2)).

2. ANSI Z89.1-1986 contains the following types and classes.

   a. Type I. Type I helmets have a full brim.

   b. Type II. Type II helmets are brimless with a peak extending forward from the crown.

   c. Class A. Class A helmets are intended to reduce the force of impact of falling objects and to reduce the danger of contact with exposed low-voltage conductors. Representative sample shells are proof-tested at 2,200 volts (phase to ground).

   d. Class B. Class B helmets are intended to reduce the force of impact of falling objects and to reduce the danger of contact with exposed high-voltage conductors. Representative sample shells are proof-tested at 20,000 volts (phase to ground).

   e. Class C. Class C helmets are intended to reduce the force of impact of falling objects. This class offers no electrical protection.

   NOTE: Proof-test voltages for Class A and B helmets are not intended to be an indication of the voltage at which the headgear protects the wearer, but only the level at which they are tested.

3. ANSI Z89.1-1997 classifies protective helmets according to the specific impact (types) and electrical performance requirements they are designed to meet (classes).

   a. Type I. Helmets intended to reduce the force of impact resulting from a blow only to the top of the head.

   b. Type II. Helmets intended to reduce the force of impact resulting from a blow which may be received off center or to the top of the head.

NOTE: ANSI Z89.1-1997 eliminated the old Type I and Type II (full brim vs. no encircling brim) design designations. In the 1997 standard, Type I is used to designate vertical impact protection and Type II is used to designate vertical and side impact protection.

c. Class G (General). Class G helmets are intended to reduce the danger of contact exposure to low-voltage conductors. Test samples are proof-tested at 2,200 volts (phase to ground).

d. Class E (Electrical). Class E helmets are intended to reduce the danger of exposure to high-voltage conductors. Test samples are proof-tested at 20,000 volts (phase to ground).

e. Class C (Conductive). Class C helmets are not intended to provide protection against contact with electrical conductors.

NOTE: ANSI Z89.1-1986 specified the helmet classes as A, B, and C; ANSI Z89.1-1997 changed these helmet classes to G, E, and C.

NOTE: Proof-test voltages for Class G and E helmets are not intended to be an indication of the voltage at which the headgear protects the wearer, but only the level at which they are tested.

4. ANSI Z89.1-2003 eliminated redundancy in the previous test methods (ANSI Z89.1-1997) and recognized state-of-the-art materials performance and technology by removing some physical requirements for helmet components that did not provide added user value. The helmet types and classes are the same as noted above for ANSI Z89.1-1997.

F. **1915.156 Foot protection**.

CSHOs shall determine compliance by employers with foot protection requirements using 29 CFR 1915.156. Employers must ensure that employees wear protective footwear when working in areas where there is a danger of foot injuries from falling or rolling objects, or objects piercing the sole (1915.156(a)).

1. The hazard assessment provision (1915.152(b)) requires employers to identify the hazards to which their employees may be exposed and have employees equipped accordingly.

2. Protective footwear must comply with any of the following consensus standards (1915.156(b)(1)):

   a. ASTM F-2412-2005, *Standard Test Methods for Foot Protection*, and ASTM F-2413-2005, *Standard Specification for Performance Requirements for Protective Footwear* (1915.156(b)(1)(i)); or

b. ANSI Z41-1999, *American National Standard for Personal Protection-Protective Footwear* (1915.156(b)(1)(ii)); or

c. ANSI Z41-1991, *American National Standard for Personal Protection-Protective Footwear* (1915.156(b)(1)(iii)).

NOTE: Protective footwear that the employer demonstrates is at least as effective as protective footwear that is constructed in accordance with one of the above consensus standards will be deemed to be in compliance with the requirements of this section (1915.156(b)(2)). The manufacturers' instructions and the distributors' literature are not in themselves evidence of effectiveness.

For additional information on foot protection, see OSHA Publication 3151-12R-2003, *Personal Protection Equipment*. The following are some examples of foot (or lower leg) protection:

- **Metatarsal guards** are designed to protect the top of the foot from the toes to the ankle over the instep of the foot. This protection is required when there is a potential for injury to that part of the foot from impact or compression hazards. Examples include handling heavy pipes or similar activities where loads could drop on or roll over an employee's foot. These guards are made of aluminum, steel, composites, fiber or plastic, and may be attached to the outside of shoes.

- **Toe guards** fit over the toes of regular shoes to protect the toes from impact and compression hazards. They may be made of steel, aluminum, or plastic.

  NOTE: ANSI Z41-1991, *American National Standard for Personal Protection- Protective Footwear*, which is incorporated by reference, requires at paragraph 1.4 that the toe box be incorporated into the footwear during construction and shall be an integral part of the footwear. An employer who chooses to provide employees with toe guards must demonstrate that they are as equally protective as the Z41-1991 standard as required by 29 CFR 1915.156(b)(1) and (b)(2).

- **Combination foot and shin guards** protect the lower legs and feet, and may be used in combination with toe guards when greater protection is needed.

- **Safety shoes or boots** provide protection against impact (impact-resistant toes), compression and puncture hazards, and have heat-resistant soles that protect against hot work surfaces.

- **Electrically conductive shoes** provide protection against the buildup of static electricity. Employees working in actual or potentially explosive and hazardous locations must wear conductive shoes to reduce the risk of static electricity buildup on the body that could produce a spark and cause an explosion or fire. Foot powder should not be used with protective conductive

footwear because foot powder provides insulation and reduces the conductive ability of the shoes. Silk, wool, and nylon socks can produce static electricity and should not be worn with conductive footwear. Conductive shoes must be removed when the task requiring their use is completed.

NOTE: Employees exposed to electrical hazards must never wear conductive shoes.

- **Electrical hazard, safety-toe shoes or boots** are intended to provide protection against open circuits of 600 volts or less under dry conditions. This footwear is designed to reduce hazards due to contact with electrically energized parts and is only intended to provide secondary electrical hazard protection on surfaces that are substantially insulated. They also provide toe protection.

  NOTE: Electrical hazard footwear is not meant for use in explosive or hazardous locations where conductive footwear is required. Nonconductive footwear must not be used in an explosive or hazardous location.

  NOTE: The insulating protection of electrical hazard shoes may be compromised if: the shoes become wet, the soles are worn through, metal particles become embedded in the sole or heel, or employees touch conductive items that are grounded.

- **Foundry shoes** have safety toe protection, insulate the feet from the extreme heat of molten metal, and keep hot metal from lodging in shoe eyelets, tongues, or other shoe parts. These snug-fitting leather or leather-substitute shoes have leather or rubber soles and rubber heels.

G. **1915.157 Hand and body protection**.

CSHOs shall determine compliance by employers with hand and body protection requirements using 29 CFR 1915.157. Employers shall select and require affected employees to use appropriate hand and body protection when their hands and other parts of their bodies are exposed to hazards such as: from skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, harmful temperature extremes, and sharp objects. Each affected employee who faces possible bodily injury of any kind that cannot be completely eliminated through engineering, work practice or administrative controls must wear appropriate body protection while performing their jobs. For additional information on hand and body protection, see OSHA Publication 3151-12R-2003, *Personal Protective Equipment.*

1. **1915.157(a)** requires employers to ensure that affected employees use appropriate PPE when their hands and other parts of their bodies are exposed to hazards that could lead to injuries. Hazards addressed include severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, harmful temperature

extremes, and sharp objects. Examples of body protection include laboratory coats, coveralls, vests, jackets, aprons, and full body suits.

The following are some types of materials used in hand and body protection which an employer may provide to comply with 1915.157:

- **Paper-like fiber** is used for disposable suits or coveralls (such as Tyvek® coveralls) to provide protection against dust and splashes (when coated with a substance that renders the garment impervious to the material that splashes on it).

- **Treated wool and cotton** adapts well to changing temperatures, is comfortable, fire-resistant and protects against dust, abrasions and rough and irritating surfaces.

- **Duck** is a closely woven cotton fabric that provides protection against cuts and bruises when handling heavy, sharp or rough materials.

- **Leather aprons and chafing gear** are used to protect against dry heat and flames.

- **Rubber, rubberized fabrics, neoprene and plastics** provide protection against certain chemicals and physical hazards. When chemical or physical hazards are present, check with the clothing manufacturer to ensure that the material selected will provide protection against the specific hazard.

- **Leather gloves** protect against sparks, moderate heat, impact, chips and rough objects.

- **Aluminized gloves** provide reflective and insulating protection against heat and require an insert made of synthetic materials to protect against heat and cold.

- **Aramid fiber gloves** wear well and resist heat and cold, abrasion, cuts and slashes, and protect against flying fragments.

- **Synthetic gloves** of various materials offer protection against heat and cold, are cut- and abrasive-resistant, and may withstand some diluted acids. These materials do not stand up against alkalis and solvents.

- **Fabric gloves** protect against dirt, slivers, chafing and abrasions. They do not provide sufficient protection for use with rough, sharp, or heavy materials. Adding a plastic coating will strengthen some fabric gloves.

- **Coated fabric gloves** are normally made from cotton flannel with napping on one side. Fabric gloves with plastic coating on the unnapped side are general-purpose hand protection with some slip-resistant qualities, and may offer

some protection against certain levels of chemical exposure. Thus, these gloves are used for tasks such as handling bricks, wire, and chemical laboratory containers. Employers must select gloves that will protect employees from chemical hazards. The manufacturer's product information, the Material Safety Data Sheet for the chemical, and *Appendix A to Subpart I of Part 1915*, can assist employers in selecting the most appropriate gloves.

- **Chemical-resistant gloves** protect the hands from skin absorption of harmful substances. They may be made of rubber, neoprene, polyvinyl alcohol, butyl rubber, etc. The gloves protect the hands against material such as, but not limited to, corrosives, oils and chlorinated solvents.

- **Butyl gloves** are made of synthetic rubber and protect against a wide variety of chemicals, such as peroxide, rocket fuels, highly corrosive acids (e.g., nitric acid, sulfuric acid, hydrofluoric acid, and red-fuming nitric acid), strong bases, alcohols, aldehydes, ketones, esters, and nitro compounds. Butyl gloves also resist oxidation, ozone corrosion, abrasion and remain flexible at low temperatures. Butyl rubber does not perform well with aliphatic and aromatic hydrocarbons and halogenated solvents.

- **Natural rubber (latex) gloves** are worn for general-purpose use. They feature outstanding tensile strength, elasticity, and temperature resistance. In addition to resisting abrasions caused by grinding and polishing, these gloves protect employees' hands from most water solutions of acids, alkalis, salts, and ketones. Latex gloves have caused allergic reactions in some individuals and may not be appropriate for all employees. Hypoallergenic gloves, glove liners, and powderless gloves are possible alternatives for employees who are allergic to latex gloves.

- **Neoprene gloves** are made of synthetic rubber and offer good pliability, finger dexterity, high density and tear resistance. They protect against hydraulic fluids, gasoline, alcohols, organic acids and alkalis. They generally have chemical- and wear-resistance properties superior to those made of natural rubber (latex).

- **Nitrile gloves** are made of a copolymer and provide protection from solvents such as trichloroethylene and perchloroethylene. Although intended for jobs requiring dexterity and sensitivity, nitrile gloves stand up to heavy use even after prolonged exposure to substances that cause other gloves to deteriorate. They offer protection when working with oils, greases, acids, caustics, and alcohols, but are generally not recommended for use with strong oxidizing agents, aromatic solvents, ketones, and acetates.

NOTE: Refer to OSHA's personal protective equipment webpage for additional information.

NOTE: Most chemical glove manufacturers provide recommendations based on the chemicals used and even the type of protection needed (such as immersion versus splash). Many of these recommendations are available from the manufacturers online.

2. 1915.157(b) requires employers to ensure that no employee wears clothing impregnated or covered, in full or in part, with flammable or combustible materials (such as grease or oil) while engaged in hot work operations or working near an ignition source.

3. 1915.157(c) requires that the employer have employees wear protective electrical insulating gloves and sleeves, or other electrical protective equipment that provides equivalent protection when the employees are exposed to electrical shock hazards while working on electrical equipment. This is identical to the previous rule except that the standard now provides for the use of "other electrical protective equipment." Examples of electrical protective equipment include: insulating blankets, matting, covers, line hoses, and gloves and sleeves made of rubber.

H. **1915.158 Lifesaving equipment**.

CSHOs shall determine compliance by employers with lifesaving equipment requirements using 29 CFR 1915.158. The May 1996 final shipyard employment PPE rule was editorially revised to clarify compliance requirements and to be consistent with terminology used by the U.S. Coast Guard in 46 CFR Part 160, *Coast Guard Lifesaving Equipment Specifications.*

1. 1915.158(a)(1) requires that personal flotation devices (PFDs) (such as life preservers, life jackets, and buoyant work vests) worn by affected employees must be approved by the U.S. Coast Guard pursuant to 46 CFR Part 160 as a Type I PFD, Type II PFD, Type III PFD or Type V PFD; and marked for use as a "work vest," for "commercial use," or "for use on vessels."

2. 1915.158(a)(2) requires the inspection of PFDs (for dry rot, chemical damage or other defects which may affect their strength and buoyancy) prior to each use and their removal from use if defective.
3. 1915.158(b)(1)-(b)(5) specifies the requirements for ring life buoys (life rings) and vessel ladders.

NOTE: Employers must ensure that their employees properly don, doff, adjust, and wear PFDs when required; see 1915.152(e) *Training*.

I. **1915.159 Personal fall arrest systems**.

CSHOs shall determine compliance by employers with personal fall arrest system requirements in 29 CFR 1915.159. This rule sets performance criteria and requirements for the use of personal fall arrest systems. These requirements are

identical to those currently in Part 1926, Subpart M standards and those proposed for Part 1910 standards.

NOTE: Effective January 1, 1998, body belts and non-locking snaphooks are no longer acceptable for use as part of a personal fall arrest system used in shipyard employment. Final rule 1915.159(b)(6), which sets the system performance criteria for personal fall arrest systems, became effective on August 22, 1996. For further guidance, see Appendix B of 29 CFR Part 1915, Subpart I, General Testing Conditions and Additional Guidelines for Personal Fall Protection Systems (Non-mandatory) and Appendix A of 29 CFR Part 1915, Subpart I, Non-mandatory Guidelines for Hazard Assessment, Personal Protective Equipment (PPE) Selection, and PPE Training Program.

1. 1915.159(a)(1) requires that connectors be made of drop-forged, pressed, or formed steel, or materials equivalent in strength to withstand failure under fall conditions.

2. 1915.159(a)(2) requires that connectors have a corrosion-resistant finish and that all surfaces and edges be smooth to prevent damage to the interfacing parts of the system.

3. 1915.159(a)(3) requires that D-rings and snaphooks used in these systems be capable of sustaining a minimum tensile load of 5,000 pounds (22.24 kN).

4. 1915.159(a)(4) requires that D-rings and snaphooks be proof-tested to a minimum tensile load of 3,600 pounds (16 kN) without cracking, breaking, or being permanently deformed.

5. 1915.159(a)(5) and (a)(6) were interim provisions provided to allow employers an alternative way to comply with the standard during the phase-out period for non-locking snaphooks.

   NOTE: Effective January 1, 1998, non-locking snaphooks are no longer acceptable for use with a personal fall arrest system used in shipyard employment (i.e., locking snaphooks must be used).

6. 1915.159(a)(7) requires that devices used for connection to the horizontal lifeline on suspended scaffolds, or to horizontal lifelines that may become vertical lifelines on similar work platforms, must be capable of locking in any direction on the lifeline. Because a suspended scaffold or platform could lose its support at either end, the connection device must be able to lock on the lifeline regardless of which end goes down.

7. 1915.159(a)(8) requires that anchorages used for the attachment of personal fall arrest equipment be independent of any anchorage being used to support or suspend platforms.

8. 1915.159(a)(9) requires that anchorages either be capable of supporting at least 5,000 pounds (22.24 kN) per employee attached or be designed, installed, and used as part of a complete personal fall arrest system that maintains a safety factor of at least two, and is used under the direction and supervision of a qualified person.

9. 1915.159(b)(1) requires that each employee be provided with a separate lifeline when vertical lifelines are used.

10. 1915.159(b)(2) requires vertical lifelines (droplines) and lanyards to have a minimum tensile (breaking) strength of 5,000 pounds (22.24 kN).

11. 1915.159(b)(3) requires that self-retracting lifelines and lanyards which automatically limit free fall to 2 feet (0.61 m) or less, be capable of sustaining a minimum static tensile load of 3,000 pounds (13.34 kN) applied to the device with the lifeline or lanyard in the fully extended position.

12. 1915.159(b)(4) requires that self-retracting lifelines and lanyards which do not limit free-fall distances to 2 feet (0.61 m) or less, ripstitch lanyards, and tearing and deforming lanyards be capable of sustaining a minimum static tensile load of 5,000 pounds (22.24 kN) applied to the device (with the lifeline or lanyard in the fully extended position if such a condition can occur in use).

13. 1915.159(b)(5) requires a qualified person to supervise the design, installation, and use of horizontal lifelines. Such horizontal lifelines must only be used as part of a complete personal fall arrest system. The complete personal fall arrest system must maintain a safety factor of at least two.

14. 1915.159(b)(6) sets the systems performance criteria for personal fall arrest systems which must:

    a. Limit the maximum arresting force on a falling employee to 1,800 pounds (8 kN) when used with a body harness;

    b. Bring a falling employee to a complete stop and limit the maximum deceleration distance an employee travels to 3.5 feet (1.07 m); and

    c. Have sufficient strength to withstand twice the potential impact energy of an employee free falling a distance of 6 feet (1.83 m), or the free fall distance permitted by the system, whichever is less.

    NOTE: This paragraph became effective on November 20, 1996. The note to final rule paragraph (b)(6) refers to non-mandatory *Appendix B of 29 CFR Part 1915, Subpart I,* which provides examples of criteria and protocols for designing and testing personal fall arrest systems that OSHA would consider to be in compliance with the standard.

NOTE: Since January 1, 1998, body belts cannot be used with a personal fall arrest system in shipyard employment.

15. 1915.159(b)(7) requires that personal fall arrest systems be rigged to prevent an employee from free falling more than 6 feet (1.83 m) or contacting any lower level.

    NOTE: There are circumstances that allow an employer to use a personal fall arrest system that permits a free fall of more than 6 feet. In general, OSHA will permit an employer to exceed the 6-foot free fall limit whenever there is no anchorage point to which the employer can attach that will enable the employer to rig the personal fall arrest system to limit the free fall to 6 feet or less – an infeasibility situation. In such cases, the employer may exceed the 6-foot free fall, but must ensure that the maximum arresting forces (MAF) listed in the standard are not exceeded. Employers need to be aware that some lanyards are only designed for a free fall distance of six feet. If the free fall distance exceeds 6 feet, then employees using such lanyards could be at risk of injury. The MAF for an employee using a body harness must be limited to 1,800 pounds. Since January 1, 1998, the use of body belts for fall arrest is prohibited.

    If an employer must exceed the free fall distance, then the employer must be able to document, based on test data, that the forces on the body will not exceed the limits established by the standard and that the personal fall arrest system will function properly. The documentation must include: (1) limiting an arrested fall to six feet is infeasible; and (2) the arresting fall distance, though more than 6 feet, is as short as feasible; and (3) reasonable steps have been taken to determine that, (a) the arresting forces will be limited to 1,800 pounds and (b) the system will not fail in an arrested fall (OSHA eTools).

16. 1915.159(c)(1) requires that the lanyard attachment point of a body harness must be in the center of the wearer's back near shoulder level or above the wearer's head.

17. 1915.159(c)(2) requires that ropes and straps (webbing) used in lanyards, lifelines, and strength components of body harnesses be made from synthetic fibers or wire rope. OSHA has determined, given the difficulty of evaluating the deterioration of natural fiber rope, that natural fiber rope is not reliable for use in a personal fall arrest system. (See preamble to 61 F.R. 26321, *Personal Protective Equipment for Shipyard Employment; Final Rule*, May 24, 1996).

18. 1915.159(c)(3) requires ropes, harnesses and lanyards to be compatible with all hardware used. The use of incompatible equipment may cause a fall; or, during arrest of a fall, allow arresting forces to be induced which cause injury.

19. 1915.159(c)(4) requires that lifelines and lanyards be protected against cuts, abrasions, burns from hot work operations, and deterioration by acids, solvents, and other chemicals.

20. 1915.159(c)(5) requires that personal fall arrest systems be visually inspected prior to each use for mildew, wear, damage, and any other deterioration. This inspection need not involve testing or impact loading of the system. If there is a reasonable basis to believe that the strength or integrity of the fall arrest system has been weakened, then the employer shall remove defective or damaged equipment from service. (See preamble to 61 F.R. 26321, *Personal Protective Equipment for Shipyard Employment; Final Rule*, May 24, 1996).

21. 1915.159(c)(6) requires that personal fall arrest systems and components that have been subjected to impact loading be removed immediately from service, and not be used again for employee protection until inspected and determined to by a qualified person to be undamaged and suitable for reuse.

22. 1915.159(c)(7) requires that the employer provide for prompt rescue of employees in the event of a fall or ensure that employees who have fallen can rescue themselves. This provision also appears in the proposed general industry rule and in the final rule for construction. OSHA anticipates that employers will evaluate the potential consequences of falls in personal fall arrest systems in their work environments and choose an appropriate means of rescue. When it is not possible to evaluate the self-rescue capacity of employees in advance, prudent employers should assume that other employees will be prepared to offer rescue assistance.

23. 1915.159(c)(8) is no longer a valid provision of the standard since body belts have not been acceptable for use with a personal fall arrest system since January 1, 1998 (full body harnesses must be used).

24. 1915.159(c)(9) requires that personal fall arrest equipment be used exclusively for employee protection. This equipment must not be used to hoist materials. This provision is intended to prevent the deterioration of personal fall arrest systems that could be caused by improper uses and types of loads.

25. 1915.159(d) requires that employees be trained to understand the application limits of the equipment and the proper hook-up, anchoring, and tie-off techniques before using any personal fall arrest equipment. Affected employees also must be trained so that they can demonstrate the proper methods of use, inspection, and storage of the equipment. Employees must know how their fall arrest equipment works in order to get the appropriate protection from it. Personal fall arrest system training requirements became effective on August 22, 1996.

J. **1915.160 Positioning device systems**.

CSHOs shall determine compliance by employers with positioning device system requirements set forth in 29 CFR 1915.160. A positioning device system (rebar positioning device; positioning/restraint lanyard and belt/harness; chain positioning assembly and belt/harness; web positioning assembly and belt/harness; lineman's body belts; window cleaner's belts; boatswain's chairs, etc.) is a system of equipment and hardware components which, when used with a body harness or body belt, allows an employee to be supported on an elevated vertical surface such as a bulkhead, ship's mast, or external ship's hull and work with both hands.

NOTE: Effective January 1, 1998, non-locking snaphooks are no longer acceptable for use with a positioning device system used in shipyard employment (1915.160(a)(4)). Final rule 1915.160(b)(2), which sets the system performance criteria for positioning device systems, became effective on November 20, 1996. Final rule 1915.160(d), positioning device system training, became effective on August 22, 1996.

1. 1915.160(a)(1) requires that all connectors have a corrosion-resistant finish and that all surfaces and edges be smooth to prevent damage to the attached belt or connecting assembly.

2. 1915.160(a)(2) provides that connecting assemblies, such as snaphooks or D-rings, have a minimum tensile strength of 5,000 pounds (22.24 kN).

3. 1915.160(a)(3) requires that anchorages for positioning device systems be capable of supporting twice the potential impact load of an employee's fall.

4. 1915.160(a)(4) requires that snaphooks, unless of a locking type designed and used to prevent disengagement, shall not be connected to each other.

   NOTE: The use of non-locking snaphooks for use with positioning device systems in shipyard employment has been prohibited since January 1, 1998; since then, only locking type snaphooks are permitted to be used in positioning device systems.

5. 1915.160(b)(1) requires that restraint (tether) lines have a minimum breaking strength of 3,000 pounds (13.34 kN). This breaking strength is necessary to ensure that the line will hold under fall arrest conditions.

6. 1915.160(b)(2) requires the following system performance criteria for positioning device systems.

   a. 1915.160(b)(2)(i) requires that window cleaners' positioning systems be capable of withstanding a drop test involving a 6-foot (1.83 m) drop of a 250-pound (113.4 kg) weight. The system must limit the initial arresting force to not more than 2,000 pounds (8.9 kN), with a duration not to exceed 2 milliseconds, and must limit subsequent arresting forces imposed on the falling employee to not more than 1,000 pounds (4.45 kN). These systems

must withstand a more rigorous drop test than other positioning device systems because of their potential for greater free fall distances.

b. 1915.160(b)(2)(ii) requires that all positioning device systems, other than window cleaners' positioning systems, be capable of withstanding a drop test of 4 feet (1.22 m) with a 250-pound (113.4 kg) weight. Positioning device systems which comply with the provisions of Section 2 of *Appendix B of 29 CFR Part 1915, Subpart I,* will be deemed by OSHA to meet the requirements of this paragraph.

7. 1915.160(c)(1) requires the inspection of positioning device systems before each work shift for mildew, wear, damage, and other deterioration. Defective components identified in such inspections must be removed from service.

8. 1915.160(c)(2) requires that positioning device systems or components subjected to impact loading be removed immediately from service, and not be used again for employee protection unless inspected and determined by a qualified person to be undamaged and suitable for reuse. This requirement is necessary to ensure that systems used for employee protection still meet the performance criteria for such systems before they are reused.

9. 1915.160(d) provides that employees must be trained in the application limits, proper hook-up, anchoring and tie-off techniques, methods of use, inspection, and storage of positioning device systems before they may use those systems. This provision emphasizes the importance of employee training in the safe use of positioning device systems. For these systems to provide employee protection, two elements are essential: the systems must be designed and used in accordance with stated performance criteria; and the employee(s) using the system must be adequately trained in the safe use of the system. Positioning device system training requirements became effective on August 22, 1996.

K. **1910.95 Hearing protection (Occupational Noise Exposure)**.

1. The 1910.95 provisions for hearing protection apply to shipyard employment. CSHOs shall determine whether employers require each affected employee to wear hearing protection when permissible noise exposure levels are exceeded for a specified time (duration per day, in hours) and feasible administrative or engineering controls fail to reduce the noise level. Employee exposure to excessive noise is determined by a number of factors, including the noise level(s) as measured in decibels (dB), the duration of exposure to noise, whether employees move between work areas with different noise levels, and whether noise is generated from one or multiple sources. The *Permissible Noise Exposures* table below is from the OSHA noise standard; Table G-16 at 1910.95(b)(2). In general, the louder the noise (sound level), the shorter the period during which employees may be exposed without requiring hearing protection.

Permissible Noise Exposures

Duration per day, in hours	Sound level dBA in slow response
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
½	110
¼ or less	115

As part of a continuing, effective hearing conservation program (1910.95(c)), employers must make hearing protection available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater measured on the A scale (slow response) at no cost to the employees.

2. The provisions of 1910.95(c) require employers to ensure that hearing protection is provided to, and worn by, all employees who are exposed to an 8-hour time-weighted average of 85 decibels or greater, or who are required by 1910.95(b)(1) to wear personal protective equipment, and

   a. have not yet had a baseline audiogram established pursuant to 1910.95(g)(5)(ii) as required by 1910.95(i)(2)(ii)(A); or

   b. have experienced a standard threshold shift (1910.95(i)(2)(ii)(B)).

3. Hearing protection equipment must be replaced as necessary (1910.95(i)(1)), as all types of PPE have a limited life span. For example, the foam seal on earmuffs, flanges on rubber earplugs, and foam earplugs all lose their elasticity over time. As hearing protectors wear out, their attenuation properties are diminished. Also, the headband on earmuffs can relax so that the earmuffs no longer provide a snug fit. Although some foam plugs can be washed several times in mild soap and water, they should usually be changed every day or two, especially in dusty or oily environments. They should not be removed with dirty hands if they are expected to be reused, as reinsertion of dirty plugs may cause ear infections.

4. Employees must be given the opportunity to select hearing protection from a variety of suitable equipment provided by the employer (1910.95(i)(3)).

   NOTE: For example, employers must give employees a choice between at least one type of earplug and one type of earmuff since individuals may be more comfortable in one type of protection than in the other.

5. The employer must provide training in the use and care of all hearing protection provided to employees (1910.95(i)(4)).

6. The employer must ensure proper initial fitting and supervise the correct use of all hearing protection (1910.95(i)(5)).

7. Hearing protector attenuation. CSHOs shall determine whether the employer has evaluated hearing protector attenuation for the specific noise environments in which the protector will be used. The employer shall use one of the evaluation methods described in 29 CFR 1910.95 Mandatory Appendix B: *Methods for Estimating the Adequacy of Hearing Protection Attenuation* (1910.95(j)(1)). The *OSHA eTOOL for Noise and Hearing Conservation*, provides useful information related to noise potential health effects, noise standards limits, evaluation of noise exposures, and requirements for an effective hearing conservation program including:

   - Monitoring program;
   - Audiometric testing program;
   - Hearing protection devices (HPDs);
   - Employee training and education; and
   - Recordkeeping.

8. Hearing protectors must attenuate employee exposure at least to an 8-hour time-weighted average of 90 decibels as required by paragraph (b) of the standard (1910.95(j)(2)).

9. For employees who have experienced a standard threshold shift, hearing protectors must attenuate employee exposure to an 8-hour time-weighted average of 85 decibels or below (1910.95(j)(3)).

10. The adequacy of hearing protector attenuation shall be re-evaluated whenever employee noise exposures increase to the extent that the hearing protectors provided may no longer provide adequate attenuation. Employers shall provide more effective hearing protectors where necessary (1910.95(j)(4)).

11. General information on some types of hearing protectors:

    a. **Single use earplugs** are made of waxed cotton, foam, silicone, rubber, or fiberglass wool. They are self-forming and, when properly inserted, they work as well as most molded earplugs.

b. **Pre-formed or molded earplugs** need to be individually fitted by a professional and can be disposable or reusable. Reusable plugs need to be cleaned after each use.

c. **Earmuffs** require a complete seal around the ears. Glasses, facial hair, long hair or facial movements (such as chewing) may reduce the protective value of earmuffs.

L. **Appendix A to Subpart I of Part 1915 – Non-Mandatory Guidelines for Hazard Assessment, Personal Protective Equipment (PPE) Selection, and PPE Training Program**.

Appendix A of 29 CFR Part 1915, Subpart I (Shipyard Employment PPE), provides suggested guidelines for complying with the requirements for hazard assessment for the selection of PPE. OSHA added Appendix A to the shipyard PPE standard to provide some examples of guidelines which an employer may follow in complying with OSHA's performance-oriented final rule.

M. **Appendix B to Subpart I of Part 1915 – General Testing Conditions and Additional Guidelines for Personal Fall Protection Systems (Non-Mandatory)**.

Appendix B of 29 CFR Part 1915, Subpart I (Shipyard Employment PPE) contains testing methods and other information to assist employers in complying with the performance-oriented criteria for personal fall arrest systems and positioning device systems contained in this standard.

XV. Employer Obligations to Provide and Pay for Personal Protective Equipment (PPE).

The PPE standards, 29 CFR 1915.151 through 1915.160, establish the employer's obligation to provide PPE to employees. In particular, 29 CFR 1915.152(a) states: "The employer shall provide and shall ensure that each affected employee uses the appropriate personal protective equipment (PPE) for the eyes, face, head, extremities, torso, and respiratory system, including protective clothing, protective shields, protective barriers, personal fall protection equipment, and life saving equipment, meeting the applicable provisions of this subpart, wherever employees are exposed to work activity hazards that require the use of PPE."

A. **Summary**.

OSHA's final rule for *Employer Payment for Personal Protective Equipment* requires employers to pay for the PPE used to comply with OSHA standards, with specific exceptions. 72 F.R. 64341-64430 (November 15, 2007).

B. **Background**.

Many OSHA safety and health standards require employers to provide their

employees with specific protective equipment, including personal protective equipment (PPE), when such equipment is necessary to protect employees from job-related injuries, illnesses, and fatalities. These requirements address PPE such as: hard hats, gloves, goggles, safety shoes, safety glasses, welding helmets and goggles, face shields, chemical protective equipment, and fall protection equipment. OSHA standards requiring PPE state that the employer is to provide such PPE, but some of these provisions do not state that the employer is to provide such PPE at no cost to the employee.

OSHA's final rule for *Employer Payment for Personal Protective Equipment* adds explicit employer payment requirements to PPE provisions applicable to most industries, including the shipyard employment PPE provisions at 29 CFR 1915. 72 F.R. 64341-64430 (November 15, 2007).

The rule did not change existing OSHA requirements as to the types of PPE that must be provided. Instead, the rule merely clarified that employers must pay for PPE **required to comply with OSHA standards**, except in the limited cases specified in the standards.

The final rule for *Employer Payment for Personal Protective Equipment* became effective on February 13, 2008. The compliance deadline was May 15, 2008. This instruction provides enforcement guidance on the payment responsibilities of employers under OSHA standards requiring the use of PPE.

The PPE payment regulatory text for shipyard employment can be found at 1910.152(f)(1) through (f)(7). The provisions applicable to other OSHA Parts are noted below.

C. **PPE that is required to be provided at no cost to employees**.

PPE Payment Standards for Covered Industries	
General Industry	1910.132(h)(1) through (h)(7)
Shipyard Employment	1915.152(f)(1) through (f)(7)
Marine Terminals	1917.96(a) through (g)
Longshoring	1918.106(a) through (g)
Construction	1926.95(d)(1) through (d)(7)

1. Employers must provide at no cost to employees the PPE that is used to comply with the provisions in Parts 1910, 1915, 1917, 1918, and 1926 that require PPE.

2. Employers must provide at no cost to employees the PPE that is necessary to protect against the hazards that the employer is aware of as a result of any assessments required by those Parts.

   In some provisions, such as 1915.152(b), there is an explicit requirement to perform a hazard assessment. In others, such as 1926.95(a), the requirement to

provide PPE "wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact" implies a duty to determine whether such hazards exist.

3. Generally, employers must provide PPE at no cost to their employees.

   a. CSHOs should determine all relevant factors that establish the existence of a employer-employee relationship. The nature and degree of control asserted over the work is one of many factors in examining whether an employer-employee relationship is present. Other factors include the level of skill required to perform effectively, the source of required instruments and tools, the location of the work, the duration of the relationship between the parties, the right of the employer to assign new projects to the individual, the extent of the individual's control over when and how long to work, the method of payment, the individual's role in hiring and paying assistants, whether the work is the regular business of the employer, the provision of employee benefits, and the tax treatment of the individual. If a difficult question arises, then consult the Regional Solicitor.

   b. As noted above, the final rule applies to general industry, shipyard employment, marine terminals, longshoring, and construction. The PPE payment requirements apply to all employers in these industries, including those with short-term employees, whether referred to as temporary employees, piece workers, seasonal employees, hiring hall employees, labor pool employees, or transient employees. The PPE payment rule does not apply to agriculture.

   c. If an employer-employee relationship is established, then the employer must provide PPE at no cost to that employee. A truly self-employed "independent contractor" is not an "employee" under the OSH Act and is not covered by OSHA standards. CSHOs should carefully scrutinize claims that employees involved in ship repairing, shipbuilding, shipbreaking and related employments are in fact truly independent contractors.

4. Employers must provide, at no cost to employees, metatarsal guards attachable to shoes when metatarsal protection is necessary (1915.152(f)(3)). If metatarsal protection is necessary under OSHA standards, and an employer requires employees to use metatarsal shoes instead of detachable guards, then the employer is required to provide the metatarsal shoe at no cost to the employee. If the employer provides metatarsal guards and allows the employee, at his or her request, to use shoes or boots with built-in metatarsal protection, then the employer is not required to pay for the metatarsal shoes or boots.

5. An employer must provide, at no cost to employees, upgraded PPE that the employer chooses to use to meet OSHA PPE requirements. OSHA standards set

minimum requirements, but if employers choose a more expensive way to comply, then they have to provide the "upgraded" PPE at no cost to employees.

D. Examples of PPE that employers must provide at no cost to employees. The list below provides examples of PPE items that an employer is required to provide at no cost to employees under the PPE payment rule in complying with an OSHA standard. This table is not intended to be exhaustive.

EXAMPLES OF PPE FOR WHICH EMPLOYER PAYMENT IS REQUIRED WHEN USED TO COMPLY WITH AN OSHA STANDARD

Metatarsal foot protection.
Special boots for longshoremen working logs.
Rubber boots with steel toes.
Shoe covers – toe caps and metatarsal guards.
Non-prescription eye protection.
Prescription eyewear inserts/lenses for full-facepiece respirators.
Prescription eyewear inserts/lenses for welding and diving helmets.
Goggles.
Face shields.
Laser safety goggles.
Firefighting PPE (helmet, gloves, boots, proximity suits, full gear).
Hard hats.
Hearing protection.
Welding PPE.
Items used in medical/laboratory settings to protect from exposure to infectious agents (aprons, lab coats, goggles, disposable gloves, shoe covers, etc.).
Non-specialty gloves: • Payment is required if they are PPE, such as for protection from dermatitis, severe cuts/abrasions. • Payment is not required if they are only for keeping clean or for cold weather (with no safety or health considerations).
Rubber sleeves.
Aluminized gloves.
Chemical-resistant gloves/aprons/clothing.
Barrier creams (unless used solely for weather-related protection).
Rubber insulating gloves.
Mesh cut-proof gloves, mesh or leather aprons.
Self Contained Breathing Apparatus, atmosphere-supplying respirators (escape only).
Respirators.
Personal fall protection.
Ladder safety device belts.
Climbing ensembles used by linemen (for example, belts and climbing hooks).
Window cleaners' safety straps.
Personal Flotation Devices (life jackets).
Encapsulating chemical protective suits.

Reflective work vests.
Bump caps.

E. **Exceptions to the PPE Payment Rule (i.e., PPE that the rule does not require to be provided at no cost to employees). For example:**

Non-Specialty PPE or Ordinary Safety Equipment

- Safety toe protective footwear (leather/steel toe shoes/boots)
- Prescription safety eyewear (ordinary)

Specialty PPE

- Rubber boots with steel toes.
- Prescription eyewear inserts/lenses for welding and diving helmets.

1. **Non-specialty safety-toe protective footwear** if the employer allows the employee to wear it off the job site. (See 29 CFR 1910.132(h)(2); 1915.152(f)(2); 1917.96(b); 1918.106(b); 1926.95(d)(2)).

2. **Non-specialty prescription safety eyewear** if the employer allows the employee to wear it off the job site. (See 29 CFR 1910.132(h)(2); 1915.152(f)(2); 1917.96(b); 1918.106(b); 1926.95(d)(2)).

3. **Metatarsal shoes** (shoes with integrated metatarsal protection) as long as the employer allows the use of and provides, at no cost to employees, metatarsal guards attachable to shoes when metatarsal protection is required by OSHA standards. (See 29 CFR 1910.132(h)(3); 1915.152(f)(3); 1917.96(c); 1918.106(c); 1926.95(d)(3)).

4. **Logging boots** required by 1910.266(d)(1)(v). The logging standard does not require employers to pay for the logging boots required by 1910.266(d)(1)(v), but leaves the responsibility for payment open to employer and employee negotiation. The final PPE payment rule excludes this PPE from the employer payment requirement. (See 29 CFR 1910.132(h)(4)(i)).

5. **Everyday clothing**. Long-sleeved shirts, long pants, street shoes, and ordinary fabric or leather work gloves may help employees avoid workplace injury and have protective value; however, the final rule excludes this everyday clothing from the employer payment rule. (See 29 CFR 1910.132(h)(4)(ii); 1915.152(f)(4)(i); 1917.96(d)(1); 1918.106(d)(1); 1926.95(d)(4)(i)).

6. **Ordinary clothing** used solely for protection from weather. Employers are not required to pay for ordinary clothing, skin creams, or other items used solely for protection from weather such as winter coats, jackets, gloves, and parkas that employees would normally have to protect themselves from the elements. (See 29 CFR 1910.132(h)(4)(iii); 1915.152(f)(4)(ii); 1917.96(d)(2); 1918.106(d)(2); 1926.95(d)(4)(ii)).

NOTE: In the rare case that ordinary weather gear is not sufficient to protect the employee and special equipment or extraordinary clothing is needed to protect the employee from unusually severe weather conditions, the employer is required to pay for such protection. Clothing used in artificially-controlled environments with extreme hot or cold temperatures, such as freezers, is not considered part of the weather gear exception.

7. **Replacement PPE when the employee has lost or intentionally damaged the PPE**. Existing PPE standards require that the employer provide replacement PPE used to comply with OSHA standards as necessary, when the PPE no longer provides the protection it was designed to provide, or when the previously provided PPE is no longer adequate or functional. The final rule clarifies that when an employee has lost or intentionally damaged the PPE issued to him or her, an employer is not required to pay for its replacement and may require the employee to pay for such replacement. (See 29 CFR 1910.132(h)(5); 1915.152(f)(5); 1917.96(e); 1918.106(e); 1926.95(d)(5)).

8. **Employee-owned PPE**.

   a. This exception refers to PPE that employees already own and request to use (and are allowed by the employer to use) instead of the PPE that the employer provides at no cost to employees.

   b. This exception also refers to upgraded PPE that employees want to buy and use (and that the employer allows) instead of the PPE that the employer provides at no cost to employees.

   c. The PPE payment rule recognizes that employees may wish to use PPE they already own. If the employer determines that the PPE is adequate and allows them to use the PPE instead of the PPE the employer has provided at no cost to employees, then the rule does not require the employer to reimburse the employee. However, the rule also makes clear that employers cannot require employees to provide their own PPE or to pay for their own PPE, unless such PPE is specifically exempted by the standard. The employee's use of PPE that he or she owns must be completely voluntary and not a condition of employment, continuing employment, or a condition for placement in a job. (See 29 CFR 1910.132(h)(6); 1915.152(f)(6); 1917.96(f); 1918.106(f); 1926.95(d)(6)).

   NOTE: OSHA recognizes that in certain emergency situations, such as response to a natural disaster, where immediate action is required, it may be necessary for employers to hire or select employees already in possession of the appropriate PPE.

   NOTE: Where employees provide their own protective equipment, employers have a duty under 1915.152(a), (c) and (d) to ensure the adequacy of the equipment, including proper maintenance and sanitation of the equipment.

9. **Upgraded and Personalized PPE.**

   a. An employer does not have an obligation to pay for PPE requested by an employee that exceeds the PPE requirements, provided that the employer provides PPE that meets the standards at no cost to the employee.

   b. If the employer allows the employee to acquire and use upgraded or personalized PPE, then the employer is not required to reimburse the employee for the equipment, provided that the employer has provided adequate PPE at no cost to the employee.

   c. An employer is still required to evaluate an employee's upgraded or personalized PPE to ensure that it is: adequate to protect from hazards present in the workplace, properly maintained, and kept in a sanitary condition.

10. **Examples of PPE and Other Items Exempted from the Employer Payment Requirements.**

The list below provides examples of PPE and other items that an employer is *not* required to provide at no cost.

EXAMPLES OF PPE AND OTHER ITEMS EXEMPTED FROM THE EMPLOYER PAYMENT REQUIREMENTS

Non-specialty safety-toe protective footwear (such as, steel-toe shoes/boots).
Non-specialty prescription safety eyewear.
Sunglasses/sunscreen.
Sturdy work shoes.
Non-specialty slip-resistant, non-safety-toe footwear.
Lineman's boots.
Ordinary cold weather gear (coats, parkas, cold weather gloves, and winter boots).
Logging boots required under 1910.266(d)(1)(v).
Ordinary rain gear.
Back belts.
Long-sleeve shirts.
Long pants.
Dust masks and respirators used under the voluntary use provisions in 1910.134.
Items worn to keep employees clean for purposes unrelated to safety or health (denim coveralls, aprons).
Items worn for product or consumer safety (not employee safety and health). For example: hairnets worn solely to protect food products from contamination, that is not used to comply with machine guarding requirements; and plastic or rubber gloves worn solely to prevent food contamination during meal preparation (This would *not* include cut-proof gloves worn to prevent lacerations).
Items worn for patient safety and health; not employee safety and health.
Uniforms, caps or other clothing worn solely to identify a person as an employee.

Travel time and related expenses for employees to shop for PPE.

F. **Permissible Use of PPE**.

1. An employer may allow PPE to be used off of the job site. However, they still must provide the required PPE at no cost to employees, even if use of the PPE is allowed off-site.

   NOTE: Some substance-specific OSHA standards require that PPE remain at the job site.

2. An employer may require that PPE provided at no cost to the employee remain at the worksite in, for example, lockers or other storage facilities.

   NOTE: If an employer requires, for any reason, employees to leave their non-specialty safety-toe protective footwear (including steel-toe shoes or steel-toe boots) and non-specialty safety eyewear at the worksite, then the employer must provide that PPE at no cost to employees.

3. Employers can use policies such as allowances, replacement schedules, and fair and uniformly enforced work rules to ensure that employees properly use and care for employer-provided PPE so long as the policies ensure that employees receive replacement PPE at no cost to them as required by the rule.

4. Recovery of PPE.

   a. The rule does not prohibit the employer from requiring the employee to return the PPE (provided at no cost) upon termination of employment. If an employee quits his/her job and does not return the employer's PPE, then the employer may require the employee to pay for it, or take reasonable steps to retrieve the PPE.

   b. Employers who employ short-term and part-time employees may require employees to return employer-owned PPE at the end of the day or when they terminate employment, and may use a deposit system or other mechanism to help ensure that such employees return the PPE.

5. Payment for Replacement PPE.

   a. Employers are required to replace PPE following the criteria in OSHA's existing standards governing when PPE is required to be replaced. For example: "Hearing protectors shall be replaced as necessary," under 29 CFR 1910.95(i)(1) means that employers must replace worn out hearing protectors.

   b. Employers must provide replacement PPE at no cost to the employee except when the employee has lost or intentionally damaged the PPE.

c. Employers do not have to bear the cost of replacing PPE that the employee has lost, even if it is a single instance. The PPE may be considered "lost" if the employee comes to work without the issued PPE.

d. The rule does not prohibit employers from sending employees home to retrieve the PPE or from charging an employee for replacement PPE when the employee fails to bring the PPE back to the workplace.

e. Employers are free to develop and implement workplace rules, such as reasonable and appropriate disciplinary policies, replacement schedules, and allowances, to ensure that employees have and use the PPE that the employer has provided at no cost to employees.

f. The employer has an obligation to pay for replacement PPE when the working conditions have changed such that PPE an employee has provided at his/her cost, and which was not previously required to comply with an OSHA standard, later becomes required by an OSHA standard.

g. If the employee has provided PPE at his/her own cost that is no longer adequate, then the employer must pay for the replacement PPE that is required to comply with the rule, unless the employee voluntarily decides to provide and pay for his or her own replacement PPE, which may occur if the employee wants personalized or upgraded PPE. However,

- the employer is prohibited from requiring employees to provide their own PPE unless exempted from the payment standard; and

- the employer must pay for replacement PPE if the employee no longer volunteers his or her own PPE for workplace use.

G. Other PPE Guidance and Information.

1. Reflective Clothing.

CSHOs shall cite Section 5(a)(1) of the OSH Act and not 29 CFR 1915.152(a), for failure to provide employees high visibility, reflective, or warning clothing or vests for any violations identified in shipyard employment.

2. Electric Arc and Flame-Resistant (FR) Clothing.

It is noted that 1910.269 does not specifically require employers to protect employees who are exposed to momentary electric arc and related thermal hazards (i.e., exposure to open flame and radiant heat) through the use of flame-resistant clothing. However, the employer must ensure that each employee who is exposed to the hazard of flames or electric arcs does not wear clothing that, when exposed to flames or electric arcs could increase the extent of injury that would be sustained by the employee.

NOTE: On June 15, 2005, OSHA proposed to amend the existing standards in Parts 1910 and 1926 for Electric Power Generation, Transmission, and Distribution; *Electrical Protective Equipment* (70 F.R. 34821-34980). OSHA proposed a rule that would require employers to provide FR clothing under certain conditions. If OSHA determines in that rulemaking that FR clothing is required, then it will become subject to the provisions of the PPE payment rule, unless the standard specifically exempts FR clothing from employer payment.

3. **Other FR Clothing**.

Employers are required to provide, at no cost to employees, FR clothing for applications such as, but not limited to, the handling of flammable chemicals.

CSHOs shall cite 29 CFR 1910.132(a), for failure to provide and ensure the use of flame-resistant clothing necessary to protect employees from burns due to flash fires.

CSHOs shall cite 29 CFR 1910.132(b), for failure to ensure that employee-owned FR clothing is properly maintained and sanitary.

CSHOs shall cite 29 CFR 1910.132(c), for failure to provide FR clothing that is of safe design and construction for the work being performed. CSHOs may refer to consensus standards such as NFPA 2112 and 2113 for selection, performance and design requirements.

Employers are required to provide at no cost to employees, personal protective clothing and equipment for fire response employees. CSHOs will consider citing 1915.505(e)(1)(i), when the employer does not supply to all fire response employees, at no cost, the appropriate personal protective clothing and equipment they may need to perform expected duties.

XVI. Citation Policy for PPE Payment.

A. **1915 standards requiring PPE to be provided at no cost to the employee**.

2. 29 CFR 1915.152(f)(1), *Payment for protective equipment*. Except as provided by paragraphs (f)(2) through (f)(6) of this section, the protective equipment, including personal protective equipment (PPE), used to comply with this part, shall be provided by the employer at no cost to employees. If a standard requiring the use of PPE addresses the issue of payment, then that specific standard shall be cited if the employer fails to provide the required PPE at no cost to employees. Below are two examples of 1915 standards that address the issue of payment for PPE.

3. 29 CFR 1915.1001(h)(2)(i), *Asbestos*. Employers must select and provide to employees at no cost, the appropriate respirators specified in 29 CFR

1910.134(d)(3)(i)(A); however, employers must not select or use filtering face piece respirators for use against asbestos fibers.

4. 29 CFR 1915.1026(g)(1), *Chromium (VI)*. The employer shall provide appropriate personal protective clothing and equipment at no cost to employees, and shall ensure that employees use such clothing and equipment.

B. **Citations for employer failure to pay under 29 CFR 1915**.

1. Employers shall be cited under 29 CFR 1915.152(f)(1) whenever they charge an employee for the cost of required PPE they have provided. Employers shall be cited under 29 CFR 1915.152(f)(5) when they have failed to pay for replacement PPE at no cost, except in cases where the employee has lost or intentionally damaged the PPE. Citations shall be issued under 29 CFR 1915.152(f)(6) when the employer requires an employee to use PPE he or she already owns, unless the PPE is exempted by paragraphs (f)(2) through (f)(5).

2. In cases where an employer is cited for failing to provide PPE, an additional citation should not be issued for failure to pay for the PPE.

3. Classifications and grouping violations of 29 CFR 1915.152(f) should be in accordance with OSHA Instruction CPL 02-00-148, *OSHA Field Operations Manual (FOM), Chapter 4, Violations*.

4. Abatement dates for violations of 29 CFR 1915.152(f) shall normally not exceed 30 days.

C. **Citation scenarios**.
The following are examples of potential workplace conditions that would lead to a citation under 29 CFR 1915.152(f):

1. The employer has provided the PPE required by an OSHA standard under Part 1915, but charges the employee for the equipment by deducting the costs of the PPE from the employee's pay.

   - The employer would be cited for a violation of 29 CFR 1915.152(f)(1).

2. The employee initially purchases the required PPE and is reimbursed by the employer several months later.

   - Reimbursement systems that delay payment of PPE should not exceed one billing cycle or one pay period. The employer would be cited for a violation of 29 CFR 1915.152(f)(1).

3. The employer provides and pays for the initial PPE in accordance with another OSHA standard but later charges the employee for replacement PPE.

- Provided that the employee has not lost or intentionally damaged the PPE, the employer would be cited for a violation of 29 CFR 1915.152(f)(5).

4. Initially, an employee voluntarily provides his/her own PPE that the employer would have been required to provide at no cost; however, the employee later decides not to continue using the PPE for work. The employer purchases the required PPE for the employee but charges the employee for it.

   - The employee may voluntarily use their own equipment without employer reimbursement, provided that the PPE is adequate and the employer allows its use. However, an employee may elect to stop volunteering their own equipment. If the employer charges the employee for replacing this PPE, then the CSHO should cite for a violation of 29 CFR 1915.152(f)(5).

D. **PPE payment questions and answers**.

1. **Are employers required to pay for lineman belts and hooks when used to comply with an OSHA standard?**

   Yes. Lineman belts and hooks provide protection to employees from falls while climbing and/or performing work. This equipment is considered PPE and employers must pay for it when used to comply with an OSHA standard.

2. **Electrical employees may use fiberglass poles known as "hot sticks" to push over power lines when they are working on the lines. Are these poles regarded as PPE?**

   No. While some specific and specialized tools have protective characteristics, such as electrically insulated "hot sticks" used by electric utility employees to handle live power lines, this equipment is more properly viewed as an engineering control that isolates the employee from the hazard. Therefore, they are not covered by the PPE payment standard. However, because they are an engineering control method, employers must pay for this equipment.

3. **As it pertains to prescription eyewear, would non-specialty safety eyewear furnished with permanent side shields be paid for by the employer?**

   The PPE payment rule specifically exempts non-specialty prescription safety eyewear. Non-specialty safety eyewear worn to protect an employee from impact hazards typically has removable or permanent side shields to provide this protection. Employers are not required to pay for prescription safety eyewear with removable or permanent side shields as long as the employer provides safety eyewear that fits over the employee's prescription lenses. (See preamble to 72 F.R. 64341-64430, *Employer Payment for Personal Protective Equipment; Final Rule*, November 15, 2007.)

4. **In some situations, employees are required to wear shoes with a slip-resistant sole that are uniform in color. The employees wear the shoes to and from work and in other places outside of the work environment. These shoes are indistinguishable from ordinary "street" shoes and many different types of shoes with rubber soles. These employees are not exposed to hazards such as crushing or penetrating injuries or falling or rolling objects, requiring safety shoes with steel toes or metatarsal protection. In such cases, would the slip-resistant shoes required here rise to the level of safety footwear with additional protection or more specialized protection, and, therefore, must be provided at no cost?**

   No. The employer is not required to pay for non-specialty shoes that offer some slip- resistant characteristics, but are otherwise ordinary clothing in nature.

5. **What are some examples of equipment that the standard does not require employers to pay for?**

   Employers are not required to pay for items worn to keep an employee clean for purposes unrelated to safety or health (e.g., denim coveralls and aprons worn solely to prevent clothing and/or skin from becoming soiled and unrelated to safety or health). In addition, the employer does not have to pay for uniforms, caps, or other clothing worn solely to identify a person as an employee. (See section XV.E.10., *Examples of PPE and Other Items Exempted from the Employer Payment Requirements* for additional examples.)

XVI. PPE Standards Reference Table.

The following table is provided to assist in the identification of applicable OSHA standards that require PPE.

OSHA Standards that Require PPE [1]

General Industry		Shipyard Employment	Marine Terminals	Longshoring	Construction	
1910.28	1910.268	1915.12	1917.22	1918.85	1926.28	1926.353
1910.66	1910.269	1915.13	1917.23	1918.86	1926.52	1926.354
1910.67	1910.272	1915.32	1917.25	1918.88	1926.55	1926.416
1910.94	1910.333	1915.33	1917.26	1918.93	1926.57	1926.451
1910.95	1910.335	1915.34	1917.49	1918.94	1926.60	1926.453
1910.119	1910.1000	1915.35	1917.71	1918.101	1926.62	1926.501
1910.120	1910.1001	1915.51	1917.73	1918.102	1926.64	1926.502
1910.132	1910.1003	1915.53	1917.91	1918.103	1926.65	1926.550
1910.133	1910.1017	1915.73	1917.92	1918.104	1926.95	1926.551
1910.134	1910.1018	1915.77	1917.93	1918.105	1926.96	1926.605
1910.135	1910.1025	1915.135	1917.94		1926.100	1926.651
1910.136	1910.1026	1915.152	1917.95		1926.101	1926.701
1910.137	1910.1027	1915.153	1917.118		1926.102	1926.760
1910.138	1910.1028	1915.154	1917.126		1926.103	1926.800
1910.146	1910.1029	1915.155	1917.152		1926.104	1926.951
1910.156	1910.1030	1915.156	1917.154		1926.105	1926.955
1910.157	1910.1043	1915.157			1926.106	1926.959
1910.160	1910.1044	1915.158			1926.250	1926.1053
1910.183	1910.1045	1915.159			1926.300	1926.1101
1910.218	1910.1047	1915.160			1926.302	1926.1126
1910.242	1910.1048	1915.504			1926.304	1926.1127
1910.243	1910.1050	1915.505				
1910.252	1910.1051	1915.1001				
1910.261	1910.1052	1915.1026				
1910.262	1910.1096					
1910.265	1910.1450					
1910.266						

[1] Other PPE requirements may be enacted from time to time. This list should not be considered definitive.