- (c) At least four units of respiratory protective equipment consisting of supplied-air respirators or self-contained breathing apparatus complying with the requirements of §1910.134 of this chapter shall be available in a suitably labeled cabinet for immediate use in case of emergency caused by oxygen deficiency or hydrogen sulfide. Any employee entering a tank in an emergency shall, in addition to respiratory protective equipment, wear a lifeline and safety harness to facilitate rescue. At least two other employees, similarly equipped, shall be continuously stationed outside the tank to observe and to provide rescue services.
- (d) The plant superintendent and foremen shall be trained and knowledgeable about the hazards of hydrogen sulfide and oxygen deficiency. They shall be trained in the use of appropriate respiratory and other protective equipment, and in rescue procedures. Other supervisory plant personnel shall be informed of these hazards and instructed in the necessary safety measures, including use of respiratory and rescue equipment.
- (e) Supervisory personnel shall be on hand at dockside to supervise discharging of bailwater from vessels.

[48 FR 30909, July 5, 1983, as amended at 65 FR 40940, June 30, 2000]

Subpart E—Personal Protection

§ 1917.91 Eye and face protection.

- (a)(1)(i) The employer shall ensure that each affected employee uses protective eye and face protection devices that comply with any of the following consensus standards:
- (A) ANSI Z87.1–2003, "American National Standard Practice for Occupational and Educational Eye and Face Protection," which is incorporated by reference in §1917.3;
- (B) ANSI Z87.1-1989 (R-1998), "American National Standard Practice for Occupational and Educational Eye and Face Protection," which is incorporated by reference in §1917.3; or
- (C) ANSI Z87.1–1989, "American National Standard Practice for Occupational and Educational Eye and Face Protection," which is incorporated by reference in §1917.3.

- (ii) Protective eye and face protection devices that the employer demonstrates are at least as effective as protective 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.
- (2) For employees wearing corrective spectacles, eye protection equipment required by paragraph (a)(1) of this section must be of a type which can be worn over spectacles. Prescription ground safety lenses may be substituted if they provide equivalent protection.
- (3) For additional requirements covering eye protection against radiant energy, see § 1917.152(h).
- (b) Eye protection equipment shall be maintained in good condition.
- (c) Used eye protection equipment shall be cleaned and disinfected before reissuance to another employee.

[48 FR 30909, July 5, 1983, as amended at 62 FR 40201, July 25, 1997; 74 FR 46359, Sept. 9, 20091

§ 1917.92 Respiratory protection.

(See $\S1917.1(a)(2)(x)$).

[65 FR 40941, June 30, 2000]

§1917.93 Head protection.

- (a) The employer shall ensure that each affected employee wears a protective helmet when working in areas where there is a potential for injury to the head from falling objects.
- (b)(1) The employer must ensure that head protection complies with any of the following consensus standards:
- (i) ANSI Z89.1–2003, "American National Standard for Industrial Head Protection," which is incorporated by reference in §1917.3;
- (ii) ANSI Z89.1–1997, "American National Standard for Industrial Head Protection," which is incorporated by reference in §1917.3; or
- (iii) ANSI Z89.1–1986, "American National Standard for Personnel Protection—Protective Headwear for Industrial Workers—Requirements," which is incorporated by reference in §1917.3.
- (2) Head protection devices that the employer demonstrates are at least as effective as head protection devices

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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.

(c) Protective hats previously worn shall be cleaned and disinfected before issuance by the employer to another employee.

[48 FR 30909, July 5, 1983, as amended at 62 FR 40201, July 25, 1997; 74 FR 46359, Sept. 9, 2009]

EFFECTIVE DATE NOTE: At 77 FR 37599, June 22, 2012, §1917.93 was amended by revising paragraph (b)(1), effective Sept. 20, 2012. For the convenience of the user, the revised text is set forth as follows:

§ 1917.93 Head protection.

* * * * * *

(b)(1) The employer must ensure that head protection complies with any of the following consensus standards:

(i) American National Standards Institute (ANSI) Z89.1–2009, "American National Standard for Industrial Head Protection," incorporated by reference in §1917.3;

(ii) American National Standards Institute (ANSI) Z89.1–2003, "American National Standard for Industrial Head Protection," incorporated by reference in §1917.3; or

(iii) American National Standards Institute (ANSI) Z89.1–1997, "American National Standard for Personnel Protection—Protective Headwear for Industrial Workers—Requirements," incorporated by reference in § 1917.3.

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§ 1917.94 Foot protection.

(a) The employer shall ensure that each affected employee wears protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects or objects piercing the sole.

(b)(1) The employer must ensure that protective footwear complies with any of the following consensus standards:

(i) ASTM F-2412-2005, "Standard Test Methods for Foot Protection," and ASTM F-2413-2005, "Standard Specification for Performance Requirements for Protective Footwear," which are incorporated by reference in §1917.3;

(ii) ANSI Z41-1999, "American National Standard for Personal Protection—Protective Footwear," which is incorporated by reference in §1917.3; or

(iii) ANSI Z41–1991, "American National Standard for Personal Protection—Protective Footwear," which is incorporated by reference in §1917.3.

(2) 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.

[62 FR 40201, July 25, 1997, as amended at 74 FR 46359, Sept. 9, 2009]

§ 1917.95 Other protective measures.

- (a) Protective clothing. (1) Employees performing work that requires special protective clothing shall be directed by the employer to wear the necessary special protective clothing.
- (2) When necessary, protective clothing previously worn shall be cleaned and disinfected before reissuance.
- (b) Personal flotation devices (PFDs).

 (1) The employer shall provide, and shall direct the wearing of PFDs for those employees, such as line handlers, who are engaged in work in which they may be pulled into the water:
- (i) When such employees are working in isolation, or
- (ii) Where physical limitations of available working space creates a hazard of falling into the water, or
- (iii) Where the work area is obstructed by cargo or other obstacles so as to prevent employees from obtaining safe footing for their work.
- (2) PFDs (life preservers, life jackets, or work vests) worn by each affected employee must be United States Coast Guard (USCG) approved pursuant to 46 CFR part 160 (Type I, II, III, or V PFD) and marked for use as a work vest, for commercial use, or for use on vessels.
- (3) Personal flotation devices shall be maintained in safe condition and shall be considered unserviceable when damaged so as to affect buoyancy or fastening capability.
- (c) Emergency facilities. When employees are exposed to hazardous substances which may require emergency bathing, eye washing or other facilities, the employer shall provide such