

CHAPTER 4

PERSONAL PROTECTIVE EQUIPMENT

Section 1. Head Protection.

(a) An approved helmet (safety hard hat) shall be required to be worn by all employees while within working areas, with the exception of self-contained areas such as truck cabs and field offices.

Section 2. Eye and Face Protection.

(a) General.

(i) The use of protective eye and face equipment where there is a potential of injury that can be prevented by such equipment shall be required. In such cases, the use of a type of protector suitable for the work to be performed shall be required. No unprotected person shall knowingly be subjected to a hazardous environmental condition. Suitable eye protectors shall be required where machines or operations present the hazard of flying objects, glare, liquids, injurious radiation, or a combination of these hazards.

(ii) Protectors shall meet the following minimum requirements:

(A) They shall provide adequate protection against the particular hazards for which they are designed.

(i) Safety glasses shall be the wrap around type or with side shields.

(B) They shall be reasonably comfortable when worn under the designated conditions.

(C) They shall fit snugly and shall not unduly interfere with the movements of the wearer.

(D) They shall be durable.

(E) They shall be capable of being disinfected.

(F) They shall be easily cleanable.

(G) They shall be kept clean and in good repair.

(iii) Employees whose vision requires the use of corrective lenses and spectacles, and who are required by these rules and regulations to wear eye protection, shall be required to wear goggles or spectacles of one of the following types:

(A) Spectacles whose protective lenses provide optical correction.

(B) Goggles that can be worn over corrective spectacles without disturbing the adjustment of the spectacles.

(C) Goggles that incorporate corrective lenses mounted behind the protective lenses.

(iv) Every protector shall be distinctly marked to facilitate identification of the manufacturer.

(v) When limitations or precautions are indicated by the manufacturer, they shall be transmitted to the user and care taken to see that such limitations and precautions are strictly observed.

(vi) Design, construction, testing, and use of devices for eye and face protection shall be in accordance with *American National Standard for Occupational and Educational Eye and Face Protection, ANSI Z87.1- Current Edition*.

Section 3. Occupational Foot Protection.

(a) Safety shoes or safety boots shall be required to be worn in the working areas.

(b) Metatarsal guards should be required as additional protection where the danger of a crushing injury to the arch of the foot exists.

(c) Safety-toe footwear for employees shall meet the requirements and specifications of *American Society for Testing and Materials (ASTM) F-2412-Current Edition "Standard Test Methods for Foot Protection,"* and *ASTM F-2413-Current Edition, "Standard Specification for Performance Requirements for Protective Footwear"*.

Section 4. General.

(a) Unreasonably loose, poorly fitted or torn clothing shall not be worn.

(b) Clothing which has been saturated with flammable or toxic substances shall be immediately removed, and the affected skin area thoroughly washed.

(c) Hazardous jewelry, such as finger rings, chain bracelets, etc., should not be worn. This is not intended to include wristwatches equipped with bands which will easily break.

(d) Hair of such length that it may become entangled in moving or rotating machinery shall be contained in a suitable manner. Beards and sideburns of employees shall be kept in such condition and of such length so as not to interfere with the proper and efficient use of gas masks, air masks, or other safety apparel or equipment.

(e) Where these rules and regulations prescribe the use of full body harnesses:

(i) An approved full body harness, provided by the employer, suitable for the particular job or hazard exposure shall be worn, and shall be attached by means of a personal fall arrest system to a suitable anchor and adjusted to allow a minimum drop, in no case greater than six (6) feet;

(ii) A separate life line shall be provided for each employee exposed to the particular job or hazard;

(iii) Personal fall arrest system components, ie., anchorage, connectors, full body harness, etc., shall be inspected prior to each use and shall be repaired or replaced if found to be defective.

(f) Flame Resistant Clothing (FRC) shall be worn by all employees on the drilling site location within the radius of the rig anchors or within seventy five (75) feet of the well bore, whichever is greater, once the well has been drilled below surface casing and until the well is shut in for demobilization, with the exception of self-contained areas (such as truck cabs and field offices) and employees changing into or out of the FRC garments.

(i) Flame Resistant Clothing (FRC) for employees shall meet the requirements and specifications of NFPA 2112 Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire, Current Edition, and NFPA 2113 Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire, Current Edition.

(ii) A sign shall be conspicuously displayed at the beginning of all entrances to the well locations stating "Flame Resistant Clothing (FRC) is required to be worn".

(g) Special protective wearing apparel shall be provided and required to be worn as deemed necessary because of an unusually hazardous situation not normal to the job.

Section 5. Emergency Equipment.

(a) Any area suspected of insufficient oxygen or contamination by flammable or toxic gases, such as Hydrogen Sulfide (H₂S) vapors or dust shall not be entered until sufficient tests have been made with appropriate instruments to determine extent of hazard and area is purged to

reduce the hazard to an allowable concentration.

(i) In the event of the presence of H₂S the following limits of exposure shall apply:

(A) Ceiling value = 10 ppm

(B) Time weighted average (TWA) = 10 ppm

(C) Acceptable maximum peak above the acceptable ceiling concentration for an eight (8) hour shift = 50 ppm. (10 minutes once only if no other measurable exposure occurs.)

(b) In the case of toxic atmosphere or lack of oxygen, any employee entering such area shall be required to use the proper respiratory equipment.

(c) In addition, any employee entering such atmospheres as specified in 5.(b) of this Section shall be required to wear a safety belt with attached tail line for emergency retrieval. Employee shall be stationed outside the hazard area with the proper rescue equipment to assist in case of emergency, and to attend to the retrieve end of the tail line.

(d) Canister-type filter masks shall be used only in an area where sufficient oxygen exists (at least 16 percent by volume).

(e) Canister-type filter masks shall be used only in areas where their capabilities will not be exceeded. Such canisters shall be proper for the hazardous contaminant.

(f) In those atmospheres where tests indicate oxygen content is less than nineteen and a half (19.5) percent oxygen by volume), employees shall be provided with and required to use self-contained breathing apparatus (SCBAs); or

(g) Supplied-air breathing apparatus may be used instead of SCBAs in subparagraph f. of this Section. In the event supplied-air breathing apparatus are used, they shall be selected, used and maintained in accordance with *Subpart I, Section 3.-Respiratory Protection, of the State of Wyoming Occupational Health and Safety 1910 - General Rules and Regulations.*

(h) All respirators on work locations shall be:

(i) Housed in a proper cabinet or other appropriate container located close to, but not within, the potential area of use;

(ii) Inspected at least monthly and documented for constant service readiness; except, if rented, prior to each use, but at least monthly.

(NOTE: Caution should be observed when using SCBAs at low temperatures due to pressure drop.)

(iii) Serviced and brought back to readiness after each usage.

(i) All employees shall be trained in the use and operation of employer provided breathing equipment available on the job and employees whose facial contours, physical impairments, hair or beard styles that would interfere with the seal necessary for respiratory protective devices, shall not enter areas in which such protection devices may be necessary.

(j) The well operator, prior to commencement of work in an area (i.e. clearing stage of the well site), shall provide provisions for contacting the nearest and other appropriate emergency medical services in case of serious injury.

(i) No derrick shall be rigged up on a work site until the emergency medical service communications has been established and tested.

(ii) A poster shall be fastened at or near emergency communications devices plainly stating the phone numbers of emergency medical services within the district of the work site.

(k) There shall be provided a first aid kit (not less than twenty four (24) unit type) that shall be maintained at the drilling site and inspected at frequent intervals. The first aid kit shall be replenished when any unit in the kit reaches a twenty five (25) percent depletion of that unit.

(i) First aid station(s). First aid station(s) shall be located as close as practicable to the highest concentration of personnel.

(ii) First aid station(s) shall be well marked and available to personnel during all working hours.

(iii) One person holding a valid first aid certificate shall be responsible for the proper use and maintenance of the first aid station(s).

(iv) A "unit" is defined as a package, bottle or other container which contains a specific item of first-aid material. For example, a bottle of Hydrogen Peroxide, a box of adhesive bandages, a box with a roll of gauze bandage, etc.

(v) In addition to the first-aid kit which must be kept on the equipment or at the place of work, there shall be available within the closest practicable distance from the operations (not to exceed five (5) minutes) the following items:

(A) Two (2) adjustable medical splints; one (1) arm, one (1) leg;

(B) Two (2) all wool blankets or blankets equal in strength and fire resistance;

(C) One (1) stretcher

(l) One (1) or more employees on each drilling site shall be adequately trained to render first aid and cardiopulmonary resuscitation (CPR), and shall have a valid certificate from the American Red Cross or equivalent training that can be verified by documentary evidence, and who will always be present.

(m) Where the eyes or body of personnel may be exposed to injurious materials, eyewash equipment for emergency use shall be provided. For information on emergency eyewash and shower equipment see, *American National Standard Institute (ANSI) Z358.1-Current Edition*.