

§ 56.3400

(b) Fixtures and accessories not addressed in ASTM F432-95 may be used for ground support provided they—

(1) Have been successful in supporting the ground in an area with similar strata, opening dimensions and ground stresses in any mine; or

(2) Have been tested and shown to be effective in supporting ground in an area of the affected mine which has similar strata, opening dimensions, and ground stresses as the area where the fixtures are expected to be used. During the test process, access to the test area shall be limited to persons necessary to conduct the test.

(c) Bearing plates shall be used with fixtures when necessary for effective ground support.

(d) The diameter of finishing bits shall be within a tolerance of plus or minus 0.030 inch of the manufacturer's recommended hole diameter for the anchor used. When separate finishing bits are used, they shall be distinguishable from other bits.

(e) Damaged or deteriorated cartridges of grouting material shall not be used.

(f) When rock bolts tensioned by torquing are used as a means of ground support,

(1) Selected tension level shall be—

(i) At least 50 percent of either the yield point of the bolt or anchorage capacity of the rock, whichever is less; and

(ii) No greater than the yield point of the bolt or anchorage capacity of the rock.

(2) The torque of the first bolt, every tenth bolt, and the last bolt installed in each work area during the shift shall be accurately determined immediately after installation. If the torque of any fixture tested does not fall within the installation torque range, corrective action shall be taken.

(g) When grouted fixtures can be tested by applying torque, the first fixture installed in each work place shall be tested to withstand 150 foot-pounds of torque. Should it rotate in the hole, a second fixture shall be tested in the same manner. If the second fixture also turns, corrective action shall be taken.

(h) When other tensioned and nontensioned fixtures are used, test methods

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shall be established to verify their effectiveness.

(i) The mine operator shall certify that tests were conducted and make the certification available to an authorized representative of the Secretary.

[51 FR 36197, Oct. 8, 1986, as amended at 51 FR 36804, Oct. 16, 1986; 63 FR 20030, Apr. 22, 1998]

PRECAUTIONS

§ 56.3400 Secondary breakage.

Prior to secondary breakage operations, material to be broken, other than hanging material, shall be positioned or blocked to prevent movement which would endanger persons in the work area. Secondary breakage shall be performed from a location which would not expose persons to danger.

§ 56.3401 Examination of ground conditions.

Persons experienced in examining and testing for loose ground shall be designated by the mine operator. Appropriate supervisors or other designated persons shall examine and, where applicable, test ground conditions in areas where work is to be performed prior to work commencing, after blasting, and as ground conditions warrant during the work shift. Highwalls and banks adjoining travelways shall be examined weekly or more often if changing ground conditions warrant.

§ 56.3430 Activity between machinery or equipment and the highwall or bank.

Persons shall not work or travel between machinery or equipment and the highwall or bank where the machinery or equipment may hinder escape from falls or slides of the highwall or bank. Travel is permitted when necessary for persons to dismount.

Subpart C—Fire Prevention and Control

AUTHORITY: Sec. 101, Federal Mine Safety and Health Act of 1977, Pub. L. 95-173, as amended by Pub. L. 95-164, 91 Stat. 1291 (30 U.S.C. 811).

§ 56.4000 Definitions.

The following definitions apply in this subpart.

Combustible liquids. Liquids having a flash point at or above 100 ° F (37.8 ° C). They are divided into the following classes:

Class II liquids—those having flash points at or above 100 ° F (37.8 ° C) and below 140 ° F (60 ° C).

Class IIIA liquids—those having flash points at or above 140 ° F (60 ° C) and below 200 ° F (93.4 ° C).

Class IIIB liquids—those having flash points at or above 200 ° F (93.4 ° C).

Combustible material. A material that, in the form in which it is used and under the conditions anticipated, will ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Wood, paper, rubber, and plastics are examples of combustible materials.

Fire resistance rating. The time, in minutes or hours, that an assembly of materials will retain its protective characteristics or structural integrity upon exposure to fire.

Flammable gas. A gas that will burn in the normal concentrations of oxygen in the air.

Flammable liquid. A liquid that has a flash point below 100 ° F (37.8 ° C), a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100 ° F (37.8 ° C), and is known as a Class I liquid.

Flash point. The minimum temperature at which sufficient vapor is released by a liquid to form a flammable vapor-air mixture near the surface of the liquid.

Multipurpose dry-chemical fire extinguisher. An extinguisher having a rating of at least 2-A:10-B:C and containing a nominal 4.5 pounds or more of dry-chemical agent.

Noncombustible material. A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Concrete, masonry block, brick, and steel are examples of noncombustible materials.

Safety can. A container of not over five gallons capacity that is designed to safely relieve internal pressure when

exposed to heat and has a spring-closing lid and spout cover.

Storage tank. A container exceeding 60 gallons in capacity used for the storage of flammable or combustible liquids.

§ 56.4011 Abandoned electric circuits.

Abandoned electric circuits shall be deenergized and isolated so that they cannot become energized inadvertently.

PROHIBITIONS/PRECAUTIONS/
HOUSEKEEPING

§ 56.4100 Smoking and use of open flames.

No person shall smoke or use an open flame where flammable or combustible liquids, including greases, or flammable gases are—

- (a) Used or transported in a manner that could create a fire hazard; or
- (b) Stored or handled.

§ 56.4101 Warning signs.

Readily visible signs prohibiting smoking and open flames shall be posted where a fire or explosion hazard exists.

§ 56.4102 Spillage and leakage.

Flammable or combustible liquid spillage or leakage shall be removed in a timely manner or controlled to prevent a fire hazard.

§ 56.4103 Fueling internal combustion engines.

Internal combustion engines shall be switched off before refueling if the fuel tanks are integral parts of the equipment. This standard does not apply to diesel-powered equipment.

§ 56.4104 Combustible waste.

- (a) Waste materials, including liquids, shall not accumulate in quantities that could create a fire hazard.
- (b) Until disposed of properly, waste or rags containing flammable or combustible liquids that could create a fire hazard shall be placed in covered metal containers or other equivalent containers with flame containment characteristics.