

MeV (million electron volts) of potential alpha energy, and exposure to these radon daughters over a period of time is expressed in terms of "working level months" (WLM). Inhalation of air containing a radon daughter concentration of 1 WL for 173 hours results in an exposure of 1 WLM."

Working place means any place in or about a mine where work is being performed.

[50 FR 4082, Jan. 29, 1985, as amended at 50 FR 20100, May 14, 1985; 53 FR 32526, Aug. 25, 1988; 60 FR 35695, July 11, 1995]

PROCEDURES

§ 57.1000 Notification of commencement of operations and closing of mines.

The owner, operator, or person in charge of any metal and nonmetal mine shall notify the nearest Mine Safety and Health Administration Metal and Nonmetal Mine Safety and Health District Office before starting operations, of the approximate or actual date mine operation will commence. The notification shall include the mine name, location, the company name, mailing address, person in charge, and whether operations will be continuous or intermittent. When any mine is closed, the person in charge shall notify the nearest subdistrict office as provided above and indicate whether the closure is temporary or permanent.

[51 FR 36198, Oct. 8, 1986, as amended at 60 FR 33723, June 29, 1995; 60 FR 35695, July 11, 1995]

Subpart B—Ground Control

AUTHORITY: 30 U.S.C. 811.

SOURCE: 51 FR 36198, Oct. 8, 1986, unless otherwise noted.

§ 57.3000 Definitions.

The following definitions apply in this subpart.

Rock burst. A sudden and violent failure of overstressed rock resulting in the instantaneous release of large amounts of accumulated energy. Rock burst does not include a burst resulting from pressurized mine gases.

Rock fixture. Any tensioned or non-tensioned device or material inserted

into the ground to strengthen or support the ground.

Travelway. A passage, walk, or haulageway regularly used or designated for persons to go from one place to another.

SCALING AND SUPPORT—SURFACE AND UNDERGROUND

§ 57.3200 Correction of hazardous conditions.

Ground conditions that create a hazard to persons shall be taken down or supported before other work or travel is permitted in the affected area. Until corrective work is completed, the area shall be posted with a warning against entry and, when left unattended, a barrier shall be installed to impede unauthorized entry.

§ 57.3201 Location for performing scaling.

Scaling shall be performed from a location which will not expose persons to injury from falling material, or other protection from falling material shall be provided.

§ 57.3202 Scaling tools.

Where manual scaling is performed, a scaling bar shall be provided. This bar shall be of a length and design that will allow the removal of loose material without exposing the person performing the work to injury.

§ 57.3203 Rock fixtures.

(a) For rock bolts and accessories addressed in ASTM F432-95, "Standard Specification for Roof and Rock Bolts and Accessories," the mine operator shall—

- (1) Obtain a manufacturer's certification that the material was manufactured and tested in accordance with the specifications of ASTM F432-95; and
- (2) Make this certification available to an authorized representative of the Secretary and to the representative of miners.

(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

§ 57.3360

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 shall be established and used to verify their effectiveness.

(i) The mine operator shall certify that tests were conducted and make the certification available to an au-

30 CFR Ch. I (7-1-02 Edition)

thorized representative of the Secretary.

[51 FR 36198, Oct. 8, 1986, as amended at 51 FR 36804, Oct. 16, 1986; 63 FR 20030, Apr. 22, 1998]

SCALING AND SUPPORT—UNDERGROUND ONLY

§ 57.3360 Ground support use.

Ground support shall be used where ground conditions, or mining experience in similar ground conditions in the mine, indicate that it is necessary. When ground support is necessary, the support system shall be designed, installed, and maintained to control the ground in places where persons work or travel in performing their assigned tasks. Damaged, loosened, or dislodged timber use for ground support which creates a hazard to persons shall be repaired or replaced prior to any work or travel in the affected area.

PRECAUTIONS—SURFACE AND UNDERGROUND

§ 57.3400 Secondary breakage.

Prior to secondary breakage operations, the 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.

§ 57.3401 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. Underground haulageways and travelways and surface area highwalls and banks adjoining travelways shall be examined weekly or more often if changing ground conditions warrant.