

amosite, crocidolite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos.

(c) Employees shall be withdrawn from areas where there is present an airborne contaminant given a "C" designation by the Conference and the concentration exceeds the threshold limit value listed for that contaminant.

[50 FR 4054, Jan. 29, 1985, as amended at 60 FR 35695, July 11, 1995; 71 FR 16667, Apr. 3, 2006]

**§ 56.5002 Exposure monitoring.**

Dust, gas, mist, and fume surveys shall be conducted as frequently as necessary to determine the adequacy of control measures.

**§ 56.5005 Control of exposure to airborne contaminants.**

Control of employee exposure to harmful airborne contaminants shall be, insofar as feasible, by prevention of contamination, removal by exhaust ventilation, or by dilution with uncontaminated air. However, where accepted, engineering control measures have not been developed or when necessary by the nature of work involved (for example, while establishing controls or occasional entry into hazardous atmospheres to perform maintenance or investigation), employees may work for reasonable periods of time in concentrations of airborne contaminants exceeding permissible levels if they are protected by appropriate respiratory protective equipment. Whenever respiratory protective equipment is used a program for selection, maintenance, training, fitting, supervision, cleaning, and use shall meet the following minimum requirements:

(a) Respirators approved by NIOSH under 42 CFR part 84 which are applicable and suitable for the purpose intended shall be furnished and miners shall use the protective equipment in accordance with training and instruction.

(b) A respirator program consistent with the requirements of ANSI Z88.2-1969, published by the American National Standards Institute and entitled "American National Standards Practices for Respiratory Protection ANSI Z88.2-1969," approved August 11, 1969,

which is hereby incorporated by reference and made a part hereof. This publication may be obtained from the American National Standards Institute, Inc., 25 W. 43rd Street, 4th Floor, New York, NY 10036; <http://www.ansi.org>, or may be examined in any Metal and Nonmetal Mine Safety and Health District Office of the Mine Safety and Health Administration.

(c) When respiratory protection is used in atmospheres immediately harmful to life, the presence of at least one other person with backup equipment and rescue capability shall be required in the event of failure of the respiratory equipment.

[50 FR 4054, Jan. 29, 1985, as amended at 60 FR 30400, June 8, 1995; 60 FR 33723, June 29, 1995; 60 FR 35695, July 11, 1995; 71 FR 16667, Apr. 3, 2006]

**§ 56.5006 Restricted use of chemicals.**

The following chemical substances shall not be used or stored except by competent persons under laboratory conditions approved by a nationally recognized agency acceptable to the Secretary.

- (a) Carbon tetrachloride.
- (b) Phenol,
- (c) 4-Nitrophenyl,
- (d) Alpha-naphthylamine,
- (e) 4,4-Methylene Bis (2-chloroaniline),
- (f) Methyl-chloromethyl ether,
- (g) 3,3 Dichlorobenzidine,
- (h) Bis (chloromethyl) ether,
- (i) Beta-naphthylamine,
- (j) Benzidine,
- (k) 4-Aminodiphenyl,
- (l) Ethyleneimine,
- (m) Beta-propiolactone,
- (n) 2-Acetylaminofluorene,
- (o) 4-Dimethylaminobenzene, and
- (p) N-Nitrosodimethylamine.

**Subpart E—Explosives**

SOURCE: 61 FR 36795, July 12, 1996, unless otherwise noted.

**§ 56.6000 Definitions.**

The following definitions apply in this subpart.

*Blasting agent.* Any substance classified as a blasting agent by the Department of Transportation in 49 CFR 173.114a(a). This document is available

**§ 56.6100**

at any MSHA Metal and Nonmetal Safety and Health district office.

*Detonating cord.* A flexible cord containing a center core of high explosives which may be used to initiate other explosives.

*Detonator.* Any device containing a detonating charge used to initiate an explosive. These devices include electric or nonelectric instantaneous or delay blasting caps and delay connectors. The term "detonator" does not include detonating cord. Detonators may be either "Class A" detonators or "Class C" detonators, as classified by the Department of Transportation in 49 CFR 173.53, and 173.100. This document is available at any MSHA Metal and Nonmetal Safety and Health district office.

*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.

*Igniter cord.* A fuse that burns progressively along its length with an external flame at the zone of burning, used for lighting a series of safety fuses in a desired sequence.

*Magazine.* A bullet-resistant, theft-resistant, fire-resistant, weather-resistant, ventilated facility for the storage of explosives and detonators (BATF Type 1 or Type 2 facility).

*Misfire.* The complete or partial failure of explosive material to detonate as planned. The term also is used to describe the explosive material itself that has failed to detonate.

*Primer.* A unit, package, or cartridge of explosives which contains a detonator and is used to initiate other explosives or blasting agents.

*Safety switch.* A switch that provides shunt protection in blasting circuits between the blast site and the switch used to connect a power source to the blasting circuit.

*Slurry.* An explosive material containing substantial portions of a liquid, oxidizers, and fuel, plus a thickener.

*Water gel.* An explosive material containing substantial portions of water, oxidizers, and fuel, plus a cross-linking agent.

[50 FR 4054, Jan. 29, 1985, as amended at 67 FR 38385, June 4, 2002; 68 FR 32361, May 30, 2003; 69 FR 38840, June 29, 2004]

**30 CFR Ch. I (7-1-06 Edition)**

STORAGE

**§ 56.6100 Separation of stored explosive material.**

(a) Detonators shall not be stored in the same magazine with other explosive material.

(b) When stored in the same magazine, blasting agents shall be separated from explosives, safety fuse, and detonating cord to prevent contamination.

**§ 56.6101 Areas around explosive material storage facilities.**

(a) Areas surrounding storage facilities for explosive material shall be clear of rubbish, brush, dry grass, and trees for 25 feet in all directions, except that live trees 10 feet or taller need not be removed.

(b) Other combustibles shall not be stored or allowed to accumulate within 50 feet of explosive material. Combustible liquids shall be stored in a manner that ensures drainage will occur away from the explosive material storage facility in case of tank rupture.

**§ 56.6102 Explosive material storage practices.**

(a) Explosive material shall be—

(1) Stored in a manner to facilitate use of oldest stocks first;

(2) Stored according to brand and grade in such a manner as to facilitate identification; and

(3) Stacked in a stable manner but not more than 8 feet high.

(b) Explosives and detonators shall be stored in closed nonconductive containers except that nonelectric detonating devices may be stored on nonconductive racks provided the case-insert instructions and the date-plant-shift code are maintained with the product.

**§ 56.6130 Explosive material storage facilities.**

(a) Detonators and explosives shall be stored in magazines.

(b) Packaged blasting agents shall be stored in a magazine or other facility which is ventilated to prevent dampness and excessive heating, weather-resistant, and locked or attended. Drop trailers do not have to be ventilated if they are currently licensed by the Federal, State, or local authorities for