

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 4082, 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]

**§ 57.5006 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-Nitrobiphenyl,
- (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.

AIR QUALITY—SURFACE ONLY  
[RESERVED]

AIR QUALITY—UNDERGROUND ONLY

**§ 57.5015 Oxygen deficiency.**

Air in all active workings shall contain at least 19.5 volume percent oxygen.

RADIATION—UNDERGROUND ONLY

**§ 57.5037 Radon daughter exposure monitoring.**

(a) In all mines at least one sample shall be taken in exhaust mine air by a competent person to determine if concentrations of radon daughters are present. Sampling shall be done using suggested equipment and procedures described in section 14.3 of ANSI N13.8-1973, entitled "American National Standard Radiation Protection in Uranium Mines," approved July 18, 1973, pages 13-15, by the American National Standards Institute, Inc., which is incorporated by reference and made a part of the standard or equivalent procedures and equipment acceptable to the Administrator, MSHA Metal and Nonmetal Mine Safety and Health district office. This publication may be examined at any Metal and Nonmetal Mine Safety and Health Subdistrict Office of the Mine Safety and Health Administration, or may be obtained from the American National Standards Institute, Inc., 25 W. 43rd Street, 4th Floor, New York, NY 10036; <http://www.ansi.org>. The mine operator may request that the required exhaust mine