§ 57.5045

section of 42 CFR part 84 and such respirator use shall be in compliance with §57.5005.

[60 FR 30400, June 8, 1995]

§ 57.5045 Posting of inactive workings.

Inactive workings in which radon daughter concentrations are above 1.0 WL, shall be posted against unauthorized entry and designated by signs indicating them as areas in which approved respirators shall be worn.

§57.5046 Protection against radon gas.

Where radon daughter concentrations exceed 10 WL, respirator protection against radon gas shall be provided in addition to protection against radon daughters. Protection against radon gas shall be provided by supplied air devices or by face masks containing absorbent material capable of removing both the radon and its daughters.

§57.5047 Gamma radiation surveys.

- (a) Gamma radiation surveys shall be conducted annually in all underground mines where radioactive ores are mined.
- (b) Surveys shall be in accordance with American National Standards (ANSI) Standard N13.8–1973, entitled "Radiation Protection in Uranium Mines", section 14.1 page 12, which is hereby incorporated by reference and made a part hereof. This publication may be examined in any Metal and Nonmetal Mine Safety and Health District Office, Mine Safety and Health Administration, or may be obtained from the American National Standards Institute, Inc., 25 W. 43rd Street, 4th www.ansi.org.
- (c) Where average gamma radiation measurements are in excess of 2.0 milliroentgens per hour in the working place, gamma radiation dosimeters shall be provided for all persons affected, and records of cumulative individual gamma radiation exposure shall be kept.
- (d) Annual individual gamma radiation exposure shall not exceed 5 rems.

 $[50~{\rm FR}~4082,~{\rm Jan}.~29,~1985,~{\rm as}$ amended at $60~{\rm FR}~33723,~{\rm June}~29,~1995;~60~{\rm FR}~35695,~{\rm July}~11,~1995;~71~{\rm FR}~16667,~{\rm Apr.}~3,~2006]$

DIESEL PARTICULATE MATTER— UNDERGROUND ONLY

SOURCE: 66 FR 5907, Jan. 19, 2001, unless otherwise noted.

§ 57.5060 Limit on exposure to diesel particulate matter.

- (a) A miner's personal exposure to diesel particulate matter (DPM) in an underground mine must not exceed an average eight-hour equivalent full shift airborne concentration of 308 micrograms of elemental carbon per cubic meter of air (308_{EC} µg/m³). [This interim permissible exposure limit (PEL) remains in effect until the final DPM exposure limit becomes effective. When the final DPM exposure limit becomes effective, MSHA will publish a document in the FEDERAL REGISTER.]
- (b)(1) Effective May 20, 2006, a miner's personal exposure to diesel particulate matter (DPM) in an underground mine must not exceed an average eight-hour equivalent full shift airborne concentration of 308 micrograms of elemental carbon per cubic meter of air $(308_{\rm EC}~\mu \rm g/m^3).$
- (2) Effective January 20, 2007, a miner's personal exposure to diesel particulate matter (DPM) in an underground mine must not exceed an average eight-hour equivalent full shift airborne concentration of 350 micrograms of total carbon per cubic meter of air $(350_{TC} \, \mu g/m^3)$.
- (3) Effective May 20, 2008, a miner's personal exposure to diesel particulate matter (DPM) in an underground mine must not exceed an average eight-hour equivalent full shift airborne concentration of 160 micrograms of total carbon per cubic meter of air ($160_{\rm TC}$ $\mu \rm g/m^3$).
- (c)(1) If a mine requires additional time to come into compliance with the final DPM limit established in §57.5060 (b) due to technological or economic constraints, the operator of the mine may file an application with the District Manager for a special extension.
- (2) The mine operator must certify on the application that the operator has posted one copy of the application at the mine site for at least 30 days prior to the date of application, and has provided another copy to the authorized representative of miners.