# Environmental Protection Agency

(b) The following material is available from the U.S. EPA Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268.

(1) Method 601, Test Method for Purgeable Halocarbons, July 1982, IBR approved September 30, 1986, for §61.67(g)(2).

(c) The following material is available for purchase from the American National Standards Institute, 25 West 43rd Street, 4th Floor, New York, New York 10036.

(1) ANSI N13.1-1969, "Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities." IBR approved for 61.93(b)(2)(ii) and 61.107(b)(2)(ii).

(2) ANST/HPS N13.1-1999 "Sampling and Monitoring Releases of Airborne Radioactive Substances from the Stacks and Ducts of Nuclear Facilities," IBR approved October 9, 2002, for §§61.93(c); 61.107(d) and Method 114, paragraph 2.1 of Appendix B to 40 CFR part 61.

(d) The following material is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325, telephone (202) 512-1800 or outside of Washington, DC area: 1-866-512-1800.

(1) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, Third Edition, November 1986, as amended by Revision I, December 1987, Order Number 955-001-00000-1:

(i) Method 8020, Aromatic Volatile Organics, IBR approved March 7, 1990, for 61.355(c)(2)(iv)(A).

(ii) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series, IBR approved March 7, 1990, for §61.355(c)(2)(iv)(B).

(iii) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics, IBR approved March 7, 1990, for §61.355(c)(2)(iv)(C).

(iv) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique, IBR approved March 7, 1990, for §61.355(c)(2)(iv)(D).

(e) The materials listed in this paragraph (e) are available for purchase from the American Petroleum Institute (API), 1220 L Street, NW., Washington, DC 20005.

(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition. February 1989. IBR approved December 14, 2000 for §61.241.

(2) [Reserved]

[48 FR 3740, Jan. 27, 1983, as amended at 48 FR 55266, Dec. 9, 1983; 49 FR 23520, June 6, 1984; 51 FR 34914, Sept. 30, 1986; 54 FR 38073, Sept. 14, 1989; 54 FR 51704, Dec. 15, 1989; 55 FR 8341, Mar. 7, 1990; 55 FR 18331, May 2, 1990; 55 FR 22027, May 31, 1990; 55 FR 32914, Aug. 13, 1990; 65 FR 62150, Oct. 17, 2000; 65 FR 78280, Dec. 14, 2000; 67 FR 57166, Sept. 9, 2002; 69 FR 18803, Apr. 9, 2004]

### §61.19 Circumvention.

No owner or operator shall build, erect, install, or use any article machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous dilutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.

[40 FR 48299, Oct. 14, 1975. Redesignated at 50 FR 46294, Nov. 7, 1985]

# Subpart B—National Emission Standards for Radon Emissions From Underground Uranium Mines

SOURCE: 54 FR 51694, Dec. 15, 1989, unless otherwise noted.

## §61.20 Designation of facilities.

The provisions of this subpart are applicable to the owner or operator of an active underground uranium mine which:

(a) Has mined, will mine or is designed to mine over 90,720 megagrams (Mg) (100,000 tons) of ore during the life of the mine; or

(b) Has had or will have an annual ore production rate greater than 9,072 Mg (10,000 tons), unless it can be demonstrated to EPA that the mine will not exceed total ore production of 90,720~Mg (100,000 tons) during the life of the mine.

[54 FR 51694, Dec. 15, 1989, as amended at 65 FR 62151, Oct. 17, 2000]

### §61.21 Definitions.

As used in this subpart, all terms not defined here have the meaning given them in the Clean Air Act or subpart A of part 61. The following terms shall have the following specific meanings:

(a) *Active mine* means an underground uranium mine which is being ventilated to allow workers to enter the mine for any purpose.

(b) *Effective dose equivalent* means the sum of the products of the absorbed dose and appropriate effectiveness factors. These factors account for differences in biological effectiveness due to the quality of radiation and its distribution in the body of reference man. The unit of the effective dose equivalent is the rem. The method for calculating effective dose equivalent and the definition of reference man are out-lined in the International Commission on Radiological Protection's Publication No. 26.

(c) Underground uranium mine means a man-made underground excavation made for the purpose of removing material containing uranium for the principal purpose of recovering uranium.

 $[54\ {\rm FR}\ 51694,\ {\rm Dec.}\ 15,\ 1989,\ as\ amended\ at\ 65\ {\rm FR}\ 62151,\ {\rm Oct.}\ 17,\ 2000]$ 

#### §61.22 Standard.

Emissions of radon-222 to the ambient air from an underground uranium mine shall not exceed those amounts that would cause any member of the public to receive in any year an effective dose equivalent of 10 mrem/y.

## §61.23 Determining compliance.

(a) Compliance with the emission standard in this subpart shall be determined and the effective dose equivalent calculated by the U.S. Environmental Protection Agency (EPA) computer code COMPLY-R. An underground uranium mine owner or operator shall calculate the source terms to be used for input into COMPLY-R by conducting testing in accordance with the procedures described in appendix B, Method 115, or

# 40 CFR Ch. I (7–1–07 Edition)

(b) Owners or operators may demonstrate compliance with the emission standard in this subpart through the use of computer models that are equivalent to COMPLY-R provided that the model has received prior approval from EPA headquarters. EPA may approve a model in whole or in part and may limit its use to specific circumstances.

 $[54\ {\rm FR}\ 51694,\ {\rm Dec.}\ 15,\ 1989,\ as\ amended\ at\ 65\ {\rm FR}\ 62151,\ {\rm Oct.}\ 17,\ 2000]$ 

## §61.24 Annual reporting requirements.

(a) The mine owner or operator shall annually calculate and report the results of the compliance calculations in \$61.23 and the input parameters used in making the calculations. This report shall cover the emissions of a calendar year and shall be sent to EPA by March 31 of the following year. Each report shall also include the following information:

(1) The name and location of the mine.

(2) The name of the person responsible for the operation of the facility and the name of the person preparing the report (if different).

(3) The results of the emissions testing conducted and the dose calculated using the procedures in §61.23.

(4) A list of the stacks or vents or other points where radioactive materials are released to the atmosphere, including their location, diameter, flow rate, effluent temperature and release height.

(5) A description of the effluent controls that are used on each stack, vent, or other release point and the effluent controls used inside the mine, and an estimate of the efficiency of each control method or device.

(6) Distances from the points of release to the nearest residence, school, business or office and the nearest farms producing vegetables, milk, and meat.

(7) The values used for all other usersupplied input parameters for the computer models (e.g., meteorological data) and the source of these data.

(8) Each report shall be signed and dated by a corporate officer in charge of the facility and contain the following declaration immediately above the signature line: "I certify under penalty of law that I have personally