to paragraph (b)(4) of this section shall not exceed 1 ppm vinyl chloride.

(6) The single-use respirators, equilibrated and stored as described in paragraphs (b)(2) and (b)(3) of this section, will be tested on an apparatus that allows a test atmosphere at 85 ±5 percent relative humidity and 25 ±5 °C to be cycled through the respirator by a breathing machine at a concentration of 10 ppm vinyl chloride monomer at the rate of 24 respirations per minute at a minute volume of 40 ±0.6 liters. Air exhaled through the respirator will be 35 ±2 °C with 94 ±3 percent relative humidity.

(7) The maximum allowable penetration after 144 minutes testing of respirators, according to paragraph (b)(6) of this section, shall not exceed 1 ppm vinyl chloride.

§ 84.254 Powered air-purifying respirators; requirements and tests.

(a) Except for the tests prescribed in § 84.207, the minimum requirements and performance tests for powered air-purifying respirators prescribed in subpart L of this part are applicable to vinyl chloride powered air-purifying respirators.

(b) The following bench tests are applicable to cartridges designed for use with powered air-purifying respirators for entry into and escape from vinyl chloride atmospheres containing adequate oxygen to support life:

(1) Four cartridges will be equilibrated at 25 ± °C by passing 85 ±5 percent relative humidity air through them at 115 liters per minute for tight-fitting facepieces and 170 liters per minute for loose-fitting hoods and helmets, for six hours.

(2) The equilibrated cartridges will be resealed, kept in an upright position at room temperature and tested according to paragraph (b)(3) of this section within 18 hours.

(3) The cartridges equilibrated and stored as described in paragraphs (b) (1) and (2) of this section will be tested on an apparatus that allows the test atmosphere at 85 ±5 percent relative humidity and 25 ±5 °C to enter the cartridge continuously at a concentration of 25 ppm vinyl chloride monomer at a total flow rate of 115 liters per minute for tight-fitting facepieces and 170 liters per minute for loose-fitting hoods and helmets.

(4) The maximum allowable penetration after six hours of testing according to paragraph (b)(3) of this section shall not exceed 1 ppm vinyl chloride.

§ 84.255 Requirements for end-of-service-life indicator.

(a) Each canister or cartridge submitted for testing and approval in accordance with §§ 84.252, 84.253, and 84.254 shall be equipped with a canister or cartridge end-of-service-life indicator which shows a satisfactory indicator change or other obvious warning before 1 ppm vinyl chloride penetration occurs. The indicator shall show such change or afford such warning at 80 ±10 percent of the total service life to 1 ppm leakage, as determined by continuing each test described in §§ 84.252(b), 84.253(b), and 84.254(b) until a 1 ppm leakage of vinyl chloride occurs.

(b) The applicant shall provide sufficient pretest data to verify the performance of the end-of-service-life indicator required in paragraph (a) of this section.

§ 84.256 Quality control requirements.

(a) In addition to the construction and performance requirements specified in §§ 84.251, 84.252, 84.253, 84.254, and 84.255, the quality control requirements in paragraphs (b), (c), and (d) of this section apply to approval of gas masks, chemical cartridge respirators, and powered air-purifying respirators for entry into and escape from vinyl chloride atmospheres containing adequate oxygen to support life.

(b) The respirators submitted for approval as described in paragraph (a) of this section shall be accompanied by a complete quality control plan meeting the requirements of subpart E of this part.

(c)(1) The applicant shall specify in the plan that a sufficient number of samples will be drawn from each bulk container of sorbent material and that where activated carbon is used, the following specific tests will be performed:

(i) Apparent density;

(ii) Iodine number;

(iii) Moisture content;

(iv) Carbon tetrachloride number; and

(v) Mesh size.

(2) The tests in paragraph (c)(1) of this section shall be performed in a quantity necessary to assure continued satisfactory conformance of the canisters and cartridges to the requirements of this subpart.

(d) Final performance quality control tests on the complete canisters and cartridges shall be accomplished using the bench tests and procedures prescribed in §§ 84.252, 84.253, 84.254, and 84.255.

§ 84.257 Labeling requirements.

(a) A warning shall be placed on the label of each gas mask, chemical-cartridge respirator, and powered air-purifying respirator, and on the label of each canister and cartridge, alerting the wearer to the need for a fitting test in accordance with the manufacturer's facepiece fitting instructions, providing service life information, providing specific instructions for disposal, and advising that the wearer may communicate to NIOSH any difficulties that may be experienced in the design and performance of any gas mask, chemical-cartridge respirator, or powered air-purifying respirator approved under the requirements of this subpart. The service lives of respirators meeting the test requirements of this subpart shall be specified as follows:

Chemical-cartridge respirator	1 hour.
Gas mask	4 hours.
Powered air-purifying respirator	4 hours.

(b) Where the service life of a respirator is approved for more than four hours, the service life for which the respirator has been approved will be specified.

§ 84.258 Fees.

The following fees shall be charged for the examination, inspection, and testing of complete assemblies and components of respirators described in §§ 84.250 and 84.251:

Complete gas mask	$1,100
Complete chemical-cartridge respirator	1,150
Complete powered air-purifying respirator	1,500
Canister or cartridge only	750

Subparts O–JJ [Reserved]

Subpart KK—Dust, Fume, and Mist; Pesticide; Paint Spray; Powered Air-Purifying High Efficiency Respirators and Combination Gas Masks

§ 84.1100 Scope and effective dates.

The purpose of this subpart KK is to establish procedures and requirements for issuing extensions of approval of particulate respirators certified prior to July 10, 1995 under the provisions of 30 CFR part 11 (See 30 CFR part 11 edition, as revised July 1, 1994.), new approvals and extensions of approval of particulate respirators for applications that are in NIOSH receipt on July 10, 1995, and approval of powered air-purifying respirators.

(a) Air-purifying respirators with particulate filters approved under the provisions of this subpart after July 10, 1995 will have a 30 CFR part 11 approval label.

(b) Only changes or modifications of non-powered air-purifying respirators with particulate filters approved under the provisions of subparts I, K, L, or M of 30 CFR part 11 or paragraph (a) of this section and deemed necessary by NIOSH to ensure the health and safety of the wearer will be approved until July 10, 1998 and will have a 30 CFR part 11 approval label.

(c) Only changes or modifications of powered air-purifying respirators with particulate filters approved under the provisions of subparts I, K, L, or M of 30 CFR part 11 or paragraph (a) of this section and deemed necessary by NIOSH to ensure the health and safety of the wearer will be approved under this subpart until July 10, 1998 and will have a 30 CFR part 11 label.

(d) Approval of powered air-purifying respirators will be issued under this subpart. Particulate filters for powered air-purifying respirators approved under the provisions of this subpart shall be only high-efficiency (HEPA) as described in § 84.1130(a)(4) and will carry a 42 CFR part 84 approval label. In addition, changes or modifications of powered HEPA air-purifying respirators approved under the provisions of this subpart KK will be approved