

Mine Safety and Health Admin., Labor

§ 72.502

72.710 Selection, fit, use, and maintenance of approved respirators.

AUTHORITY: 30 U.S.C. 811, 813(h), 957, 961.

SOURCE: 59 FR 8327, Feb. 18, 1994, unless otherwise noted.

Subpart A—General

§ 72.1 Scope.

The health standards in this part apply to all coal mines.

Subparts B–C [Reserved]

Subpart D—Diesel Particulate Matter—Underground Areas of Underground Coal Mines

SOURCE: 66 FR 5704, Jan. 19, 2001, unless otherwise noted.

§ 72.500 Emission limits for permissible diesel-powered equipment.

(a) Each piece of permissible diesel-powered equipment introduced into an underground area of an underground coal mine after May 21, 2001 must emit no more than 2.5 grams per hour of diesel particulate matter.

(b) As of July 19, 2002, each piece of permissible diesel-powered equipment operated in an underground area of an underground coal mine must emit no more than 2.5 grams per hour of diesel particulate matter.

[66 FR 5704, Jan. 19, 2001, as amended at 66 FR 15033, Mar. 15, 2001; 66 FR 27866, May 21, 2001]

§ 72.501 Emission limits for nonpermissible heavy-duty diesel-powered equipment, generators and compressors.

(a) Each piece of nonpermissible heavy-duty diesel-powered equipment (as defined by §75.1908(a) of this part), generator or compressor introduced into an underground area of an underground coal mine after May 21, 2001 must emit no more than 5.0 grams per hour of diesel particulate matter.

(b) As of July 21, 2003, each piece of nonpermissible heavy-duty diesel-powered equipment (as defined by §75.1908(a) of this part), generator or compressor operated in an underground area of an underground coal mine must emit no more than 5.0 grams per hour of diesel particulate matter.

(c) As of January 19, 2005, each piece of nonpermissible heavy-duty diesel-powered equipment (as defined by §75.1908(a) of this part), generator or compressor operated in an underground area of an underground coal mine must emit no more than 2.5 grams per hour of diesel particulate matter.

(d) Notwithstanding the other provisions of this section, a generator or compressor that discharges its exhaust directly into intake air that is coursed directly to a return air course, or discharges its exhaust directly into a return air course, is not subject to the applicable requirements of this section.

[66 FR 5704, Jan. 19, 2001, as amended at 66 FR 15033, Mar. 15, 2001; 66 FR 27866, May 21, 2001]

§ 72.502 Requirements for nonpermissible light-duty diesel-powered equipment other than generators and compressors.

(a) Each piece of nonpermissible light-duty diesel-powered equipment (as defined by §75.1908(b) of this chapter), other than generators and compressors, introduced into an underground area of an underground coal mine after May 21, 2001 must emit no more than 5.0 grams per hour of diesel particulate matter.

(b) A piece of nonpermissible light-duty diesel-powered equipment must be deemed to be in compliance with the requirements of paragraph (a) of this section if it utilizes an engine which meets or exceeds the applicable particulate matter emission requirements of the Environmental Protection Administration listed in Table 72.502–1, as follows:

TABLE 72.502–1

EPA requirement	EPA category	PM limit
40 CFR 86.094–8(a)(1)(i)(A)(2)	light duty vehicle	0.1 g/mile.
40 CFR 86.094–9(a)(1)(i)(A)(2)	light duty truck	0.1 g/mile.
40 CFR 86.094–11(a)(1)(iv)(B)	heavy duty highway engine	0.1 g/bhp-hr.
40 CFR 89.112(a)	Tier 2 nonroad	Varies by power:

TABLE 72.502–1—Continued

EPA requirement	EPA category	PM limit
	kW< (hp<11)	0.80 g/kW-hr (0.60 g/bhp-hr).
	8≤kW<19 (11≤hp<25)	0.80 g/kW-hr (0.60 g/bhp-hr).
	19≤kW<37 (25≤hp<50)	0.60 g/kW-hr (0.45 g/bhp-hr).
	37≤kW<75 (50≤hp<100)	0.40 g/kW-hr (0.30 g/bhp-hr).
	75≤kW<130 (100≤hp<175)	0.30 g/kW-hr (0.22 g/bhp-hr).
	130≤kW<225 (175≤hp<300)	0.20 g/kW-hr (0.15 g/bhp-hr).
	225≤kW<450 (300≤hp<600)	0.20 g/kW-hr (0.15 g/bhp-hr).
	450≤kW<560 (600≤hp<750)"	0.20 g/kW-hr (0.15 g/bhp-hr).
	kW≥560 (hp≥750)	0.20 g/kW-hr (0.15 g/bhp-hr).

Notes: "g" means grams; "kW" means kilowatt; "hp" means horsepower; "g/kW-hr" means grams/kilowatt-hour; "g/bhp-hr" means grams/brake horsepower-hour.

(c) The requirements of this section do not apply to any diesel-powered ambulance or fire fighting equipment that is being used in accordance with the mine fire fighting and evacuation plan under § 75.1502.

[66 FR 5704, Jan. 19, 2001, as amended at 66 FR 15033, Mar. 15, 2001; 66 FR 27866, May 21, 2001; 70 FR 36347, June 23, 2005]

§ 72.503 Determination of emissions; filter maintenance; definition of "introduced".

(a) MSHA will determine compliance with the emission requirements established by this part by using the amount of diesel particulate matter emitted by a particular engine determined from the engine approval pursuant to § 7.89(a)(9)(iii)(B) or § 7.89(a)(9)(iv)(A) of this title, with the exception of engines deemed to be in compliance by meeting the EPA requirements specified in Table 72.502–1 (§ 72.502(b)).

(b) Except as provided in paragraph (c) of this section, the amount by which an aftertreatment device can reduce engine emissions of diesel particulate matter as determined pursuant to paragraph (a) must be established by a laboratory test:

(1) on an approved engine which MSHA has determined, pursuant to paragraph (a) of this section, to emit no more diesel particulate matter than the engine being used in the piece of diesel-powered equipment in question;

(2) using the test cycle specified in Table E-3 of § 7.89 of this title, and following a test procedure appropriate for the filtration system, by a laboratory capable of testing engines in accordance with the requirements of Subpart E of part 7 of this title; and

(3) with an aftertreatment device representative of that being used on the piece of diesel-powered equipment in question.

(c) In lieu of the laboratory tests required by paragraph (b), the Secretary may accept the results of tests conducted or certified by an organization whose testing standards are deemed by the Secretary to be as rigorous as those set forth by paragraph (b) of this section; and further, the Secretary may accept the results of tests for one aftertreatment device as evidencing the efficiency of another aftertreatment device which the Secretary determines to be essentially identical to the one tested.

(d) Operators must maintain in accordance with manufacturer specifications and free of observable defects, any aftertreatment device installed on a piece of diesel equipment upon which the operator relies to remove diesel particulate matter from diesel emissions.

(e) For purposes of §§ 72.500(a), 72.501(a) and 72.502(a), the term "introduced" means any piece of equipment whose engine is a new addition to the underground inventory of engines of the mine in question, including newly purchased equipment, used equipment, and equipment receiving a replacement engine that has a different serial number than the engine it is replacing. "Introduced" does not include a piece of equipment whose engine was previously part of the mine inventory and rebuilt.

§ 72.510 Miner health training.

(a) Operators must provide annual training to all miners at a mine who