

warning device convenient to the operator. Warning devices shall be operated manually or pneumatically.

**§ 36.29 Brakes.**

All mobile diesel-powered transportation equipment shall be equipped with adequate brakes acceptable to MSHA.

**§ 36.30 Rerailing device.**

All mobile diesel-powered transportation equipment designed to travel on rails in haulage service shall carry a suitable rerailing device.

**§ 36.31 Fire extinguisher.**

Each unit of mobile diesel-powered transportation equipment shall be fitted with a fire extinguisher carried in a location easily accessible to the operator and protected by position from external damage. Liquid carbon dioxide extinguishers shall contain an active charge of not less than 4 pounds. Pressurized dry chemical extinguishers shall contain an active charge of not less than 2½ pounds.

**§ 36.32 Electrical components and systems.**

(a) Electrical components on mobile diesel-powered transportation equipment shall be certified or approved under Part 18, 20 or 27 of this chapter, as applicable, and shall bear the certification number assigned by MSHA.

(b) Electrical systems on mobile diesel-powered transportation equipment shall meet the requirements of Part 18 or 27 of this chapter, as applicable.

[47 FR 11372, Mar. 16, 1982]

**§ 36.33 Headlights and fixtures.**

(a) Headlights and lighting fixtures on mobile diesel-powered transportation equipment shall be protected from external damage by recessing them in the equipment frame, enclosing them within a shield of substantial construction, or by any other method that provides equivalent protection.

(b) Mobile diesel-powered transportation equipment shall be equipped with at least one headlight on each end.

[47 FR 11372, Mar. 16, 1982]

**Subpart C—Test Requirements**

**§ 36.40 Test site.**

Tests shall be conducted at MSHA's Diesel Testing Laboratory or other appropriate place(s) determined by MSHA.

[39 FR 24006, June 28, 1974, as amended at 43 FR 12318, Mar. 24, 1978]

**§ 36.41 Testing methods.**

Mobile diesel-powered transportation equipment submitted for certification and approval shall be tested to determine its combustion, explosion-proof, and other safety characteristics. MSHA shall prescribe the tests and reserves the right to modify the procedure(s) to attain these objectives (see § 36.20).

**§ 36.42 Inspection.**

A detailed inspection shall be made of the equipment and all components and features related to safety in operation. The inspection shall include:

(a) Investigating the materials, workmanship, and design to determine their adequacy.

(b) Checking the parts and assemblies against the drawings and specifications with respect to materials, dimensions, and locations to verify their conformance.

(c) Inspecting and measuring joints, flanges, and other possible flame paths in the intake and exhaust systems to determine whether they will prevent the issuance of flame or propagation of an internal explosion.

(d) Inspecting and measuring flame arresters to determine whether they will prevent the issuance of flame or propagation of an internal explosion.

**§ 36.43 Determination of exhaust-gas composition.**

(a) Samples shall be taken to determine the composition of the exhaust gas while the engine is operated at loads and speeds prescribed by MSHA to determine the volume of air (ventilation) required to dilute the exhaust gas (see § 36.45). The engine shall be at temperature equilibrium before exhaust-gas samples are collected or other test data are observed. At all test conditions the intake mixture shall contain 1.5 ±0.1 percent, by volume, of