§ 75.1911 Fire suppression systems for diesel-powered equipment and fuel transportation units.

(a) The fire suppression system required by §§ 75.1907 and 75.1909 shall be a multipurpose dry chemical type (ABC) fire suppression system listed or approved by a nationally recognized independent testing laboratory and appropriate for installation on diesel-powered equipment and fuel transportation units.

(1) The system shall be installed in accordance with the manufacturer's specifications and the limitations of the listing or approval.

(2) The system shall be installed in a protected location or guarded to minimize physical damage from routine vehicle operations.

(3) Suppressant agent distribution tubing or piping shall be secured and protected against damage, including pinching, crimping, stretching, abrasion, and corrosion.

(4) Discharge nozzles shall be positioned and aimed for maximum fire suppression effectiveness. Nozzles shall also be protected against the entrance of foreign materials such as mud, coal dust, or rock dust.

(b) The fire suppression system shall provide fire suppression and, if automatic, fire detection for the engine including the starter, transmission, hydraulic pumps and tanks, fuel tanks, exposed brake units, air compressors and battery areas on diesel-powered equipment and electric panels or controls used on fuel transportation units and other areas as necessary.

(c) If automatic, the fire suppression system shall include audible and visual alarms to warn of fires or system faults.

(d) The fire suppression system shall provide for automatic engine shutdown. If the fire suppression system is automatic, engine shutdown and discharge of suppressant agent may be delayed for a maximum of 15 seconds after the fire is detected by the system.

(e) The fire suppression system shall be operable by at least two manual actuators. One actuator shall be located on each side of the equipment. If the equipment is provided with an operator's compartment, one of the manual actuators shall be located in the compartment within reach of the operator.

(f) The fire suppression system shall remain operative in the event of engine shutdown, equipment electrical system failure, or failure of any other equipment system.

(g) The electrical components of each fire suppression system installed on equipment used where permissible electric equipment is required shall be permissible or intrinsically safe and such components shall be maintained in permissible or intrinsically safe condition.

(h) Electrically operated detection and actuation circuits shall be monitored and provided with status indicators showing power and circuit continuity. If the system is not electrically operated, a means shall be provided to indicate the functional readiness status of the detection system.

(i) Each fire suppression system shall be tested and maintained in accordance with the manufacturer's recommended inspection and maintenance program and as required by the nationally recognized independent testing laboratory listing or approval, and be visually inspected at least once each week by a person trained to make such inspections.

(j) Recordkeeping. Persons performing inspections and tests of fire suppression systems under paragraph (l) shall record when a fire suppression system does not meet the installation or maintenance requirements of this section.

(1) The record shall include the equipment on which the fire suppression system did not meet the installation or maintenance requirements of this section, the defect found, and the corrective action taken.

(2) Records are to be kept manually in a secure manner not susceptible to alteration or recorded electronically in a secured computer system that is not susceptible to alteration.
§ 75.1912 Fire suppression systems for
permanent underground diesel fuel
storage facilities.

(a) The fire suppression system re-
quired by §75.1903 shall be an auto-
matic multipurpose dry chemical type
(ABC) fire suppression system listed or
approved as an engineered dry chem-
ical extinguishing system by a nation-
ally recognized independent testing
laboratory and appropriate for installa-
tion at a permanent underground diesel
fuel storage facility.

(1) Alternate types of fire suppression
systems shall be approved in accord-
ance with §75.1107–13 of this part.

(2) The system shall be installed in
accordance with the manufacturer’s
specifications and the limitations of
the listing or approval.

(3) The system shall be installed in a
protected location or guarded to pre-
vent physical damage from routine op-
erations.

(4) Suppressant agent distribution
tubing or piping shall be secured and
protected against damage, including
pinching, crimping, stretching, abra-
sion, and corrosion.

(5) Discharge nozzles shall be posi-
tioned and aimed for maximum fire
suppression effectiveness in the pro-
tected areas. Nozzles must also be pro-
tected against the entrance of foreign
materials such as mud, coal dust, and
rock dust.

(b) The fire suppression system shall
provide automatic fire detection and
automatic fire suppression for all areas
within the facility.

(c) Audible and visual alarms to warn
of fire or system faults shall be pro-
vided at the protected area and at a
surface location which is continually
monitored by a person when personnel
are underground. In the event of a fire,
personnel shall be warned in accord-
ance with the provisions set forth in
§75.1502.

(d) The fire suppression system shall
deenergize all power to the diesel fuel
storage facility when actuated except
that required for automatic enclosure
and alarms.

(e) Fire suppression systems shall in-
clude two manual actuators located as
follows:

(1) At least one within the fuel stor-
age facility; and

(2) At least one a safe distance away
from the storage facility and located in
intake air, upwind of the storage facil-
ity.

(f) The fire suppression system shall
remain operational in the event of
electrical system failure.

(g) Electrically operated detection
and actuation circuits shall be mon-
tored and provided with status indica-
tors showing power and circuit con-
tinuity. If the system is not elec-
trically operated, a means shall be pro-
duced to indicate the functional readi-
ness status of the detection system.

(h) Each fire suppression system
shall be tested and maintained in ac-
cordance with the manufacturer’s rec-
ommended inspection and maintenance
program and as required by the nation-
ally recognized independent testing
laboratory listing or approval, and be
visually inspected at least once each
week by a person trained to make such
inspections.

(i) Recordkeeping. Persons performing
inspections and tests of fire suppres-
sion systems under paragraph (h) shall
record when a fire suppression system
does not meet the installation or main-
tenance requirements of this section.

(1) The record shall include the fac-
ility whose fire suppression system did
not meet the installation or mainte-
nance requirements of this section, the
defect found, and the corrective action
taken.