

**FEDERAL PROVISIONS NOT INCLUDED
IN DRAFT PROPOSED RULEMAKING**

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

Title 30 Parts 1-199 Mineral Resources
Department of Labor
Mine Safety and Health Administration
Code of Federal Regulations

**PART 77--MANDATORY SAFETY STANDARDS, SURFACE COAL MINES AND SURFACE WORK AREAS OF
UNDERGROUND COAL MINES**

Subpart A--General

Section

77.1 Scope.

77.2 Definitions.

Subpart B--Qualified and Certified Persons

77.100 Certified person.

77.101 Tests for methane and for oxygen deficiency; qualified person.

77.102 Tests for methane; oxygen deficiency; qualified person, additional requirement.

77.103 Electrical work; qualified person.

77.104 Repair of energized surface high voltage lines; qualified person.

77.105 Qualified hoistman; slope or shaft sinking operation; qualifications.

77.106 Records of certified and qualified persons.

77.107 Training programs.

77.107-1 Plans for training programs.

Subpart C--Surface Installations

77.200 Surface installations; general.

77.201 Methane content in surface installations.

77.201-1 Tests for methane; qualified person; use of approved device.

77.201-2 Methane accumulations; change in ventilation.

77.202 Dust accumulations in surface installations.

77.203 Use of material or equipment overhead; safeguards.

77.204 Openings in surface installations; safeguards.

77.205 Travelways at surface installations.

77.206 Ladders; construction; installation and maintenance.

77.207 Illumination.

77.208 Storage of materials.

77.209 Surge and storage piles.

77.210 Hoisting of materials.

77.211 Draw-off tunnels; stockpiling and reclaiming operations; general.

77.211-1 Continuous methane monitoring device; installation and operation; automatic deenergization of electric equipment.

77.212 Draw-off tunnel ventilation fans; installation.

77.213 Draw-off tunnel escapeways.

77.214 Refuse piles; general.

77.215 Refuse piles, construction requirements.

77.215-1 Refuse piles; identification.

77.215-2 Refuse piles; reporting requirements.

77.215-3 Refuse piles; certification.

77.215-4 Refuse piles; abandonment.

77.216 Water, sediment, or slurry impoundments and impounding structures; general.

77.216-1 Water, sediment or slurry impoundments and impounding structures; identification.

77.216-2 Water, sediment, or slurry impoundments and impounding structures; minimum plan requirements; changes or modifications; certification.

77.216-3 Water, sediment, or slurry impoundments and impounding structures; inspection requirements; correction of hazards; program requirements.

77.216-4 Water, sediment or slurry impoundments and impounding structures; reporting requirements; certification.

77.216-5 Water, sediment or slurry impoundments and impounding structures; abandonment.

77.217 Definitions.

Subpart D--Thermal Dryers

77.300 Thermal dryers; general.

77.301 Dryer heating units; operation.

77.302 Bypass stacks.

77.303 Hot gas inlet chamber dropout doors.

77.304 Explosion release vents.

77.305 Access to drying chambers, hot gas inlet chambers and ductwork; installation and maintenance.

77.306 Fire protection.

77.307 Thermal dryers; location and installation; general.

77.308 Structures housing other facilities; use of partitions.

77.309 Visual check of system equipment.

77.309-1 Control stations; location.

77.310 Control panels.

77.311 Alarm devices.

77.312 Fail safe monitoring systems.

77.313 Wet-coal feedbins; low-level indicators.

77.314 Automatic temperature control instruments.

77.315 Thermal dryers; examination and inspection.

Subpart E--Safeguards for Mechanical Equipment

- 77.400 Mechanical equipment guards.
- 77.401 Stationary grinding machines; protective devices.
- 77.402 Hand-held power tools; safety devices.
- 77.403 Mobile equipment; falling object protective structures (FOPS).
- ~~77.403-2~~ Mobile equipment; rollover protective structures (ROPS).
- ~~77.403-2~~ Incorporation by reference.
- 77.404 Machinery and equipment; operation and maintenance.
- 77.405 Performing work from a raised position; safeguards.
- 77.406 Drive belts.
- 77.407 Power driven pulleys.
- 77.408 Welding operations.
- 77.409 Shovels, draglines, and tractors.
- 77.410 Mobile equipment; automatic warning devices.
- 77.411 Compressed air and boilers; general.
- 77.412 Compressed air systems.
- 77.413 Boilers.

Subpart F--Electrical Equipment--General

- 77.500 Electric power circuits and electric equipment deenergization.
- 77.501 Electric distribution circuits and equipment; repair.
- 77.501-1 Qualified person.
- 77.502 Electric equipment; examination, testing, and maintenance.
- 77.502-1 Qualified person.
- 77.502-2 Electric equipment; frequency of examination and testing.
- 77.503 Electric conductors; capacity and insulation.
- 77.503-1 Electric conductors.
- 77.504 Electrical connections or splices; suitability.
- 77.505 Cable fittings; suitability.
- 77.506 Electric equipment and circuits; overload and short-circuit protection.
- 77.506-1 Electric equipment and circuits; overload and short circuit protection; minimum requirements.
- 77.507 Electric equipment; switches.
- 77.508 Lightning arresters; ungrounded and exposed power conductors and telephone wires.
- 77.508-1 Lightning arresters; wires entering buildings.
- 77.509 Transformers; installation and guarding.
- 77.510 Resistors; location and guarding.

- 77.511 Danger signs at electrical installations.
- 77.512 Inspection and cover plates.
- 77.513 Insulating mats at power switches.
- 77.514 Switchboard; passageways and clearance.
- 77.515 Bare signal or control wires; voltage.
- 77.516 Electric wiring and equipment; installation and maintenance

Subpart G--Trailing Cables

- 77.600 Trailing cables; short-circuit protection; disconnecting devices.
- 77.601 Trailing cables or portable cables, temporary splices.
- 77.602 Permanent splicing of trailing cables.
- 77.603 Clamping of trailing cables to equipment.
- 77.604 Protection of trailing cables.
- 77.605 Breaking trailing cable and power cable connections.
- 77.606 Energized trailing cables; handling.
- 77.606-1 Rubber gloves; minimum requirements.

Subpart H--Grounding

- 77.700 Grounding metallic sheaths, armors, and conduits enclosing power conductors.
- 77.700-1 Approved methods of grounding.
- 77.701 Grounding metallic frames, casings, and other enclosures of electric equipment.
- 77.701-1 Approved methods of grounding of equipment receiving power from ungrounded alternating current power systems.
- 77.701-2 Approved methods of grounding metallic frames, casings and other enclosures of electric equipment receiving power from a direct-current power system.
- 77.701-3 Grounding wires; capacity.
- 77.701-4 Use of grounding connectors.
- 77.702 Protection other than grounding.
- 77.703 Grounding frames of stationary high-voltage equipment receiving power from ungrounded delta systems.
- 77.703-1 Approved methods of grounding.
- 77.704 Work on high-voltage lines; deenergizing and grounding.
- 77.704-1 Work on high-voltage lines.
- 77.704-2 Repairs to energized high-voltage lines.
- 77.704-3 Work on energized high-voltage surface lines; reporting.
- 77.704-4 Simultaneous repairs.
- 77.704-5 Installation of protective equipment.
- 77.704-6 Protective clothing; use and inspection.
- 77.704-7 Protective equipment; inspection.
- 77.704-8 Protective equipment; testing and storage.

- 77.704-9 Operating disconnecting or cutout switches.
- 77.704-10 Tying into energized high-voltage surface circuits.
- 77.704-11 Use of grounded messenger wires; ungrounded systems.
- 77.705 Guy wires; grounding.

Subpart I--Surface High-Voltage Distribution

- 77.800 High-voltage circuits; circuit breakers.
- 77.800-1 Testing, examination, and maintenance of circuit breakers; procedures.
- 77.800-2 Testing, examination, and maintenance of circuit breakers; record.
- 77.801 Grounding resistors.
- 77.801-1 Grounding resistors; continuous current rating.
- 77.802 Protection of high-voltage circuits; neutral grounding resistors; disconnecting devices.
- 77.803 Fail safe ground check circuits on high-voltage resistance grounded systems.
- 77.803-1 Fail safe ground check circuits; maximum voltage.
- 77.803-2 Ground check systems not employing pilot check wires; approval by the Secretary.
- 77.804 High-voltage trailing cables; minimum design requirements.
- 77.805 Cable couplers and connection boxes; minimum design requirements.
- 77.806 Connection of single-phase loads.
- 77.807 Installation of high-voltage transmission cables.
- 77.807-1 High-voltage powerlines; clearances above ground.
- 77.807-2 Booms and masts; minimum distance from high-voltage lines.
- 77.807-3 Movement of equipment; minimum distance from high-voltage lines.
- 77.808 Disconnecting devices.
- 77.809 Identification of circuit breakers and disconnecting switches.
- 77.810 High-voltage equipment; grounding.
- 77.811 Movement of portable substations and transformers.

Subpart J--Low- and Medium-Voltage Alternating Current Circuits

- 77.900 Low- and medium-voltage circuits serving portable or mobile three-phase alternating current equipment; circuit breakers.
- 77.900-1 Testing, examination, and maintenance of circuit breakers; procedures.
- 77.900-2 Testing, examination, and maintenance of circuit breakers; record.
- 77.901 Protection of low- and medium-voltage three-phase circuits.
- 77.901-1 Grounding resistor; continuous current rating.
- 77.902 Low- and medium-voltage ground check monitor circuits.
- 77.902-1 Fail safe ground check circuits; maximum voltage.
- 77.902-2 Approved ground check systems not employing pilot check wires.
- 77.902-3 Attachment of ground conductors and ground check wires to equipment frames; use of separate connections.

77.903 Disconnecting devices.

77.904 Identification of circuit breakers.

77.905 Connection of single-phase loads.

77.906 Trailing cables supplying power to low-voltage mobile equipment; ground wires and ground check wires.

Subpart K--Ground Control

77.1000 Highwalls, pits, and spoil banks; plans.

77.1000-1 Filing of plan.

77.1001 Stripping; loose material.

77.1002 Box cuts; spoil material placement.

77.1003 Benches.

77.1004 Ground control; inspection and maintenance; general.

77.1005 Scaling highwalls; general.

77.1006 Highwalls; men working.

77.1007 Drilling; general.

77.1008 Relocation of drills; safeguards.

77.1009 Drill; operation.

77.1010 Collaring holes.

77.1011 Drill holes; guarding.

77.1012 Jackhammers; operation; safeguards.

77.1013 Air drills; safeguards.

Subpart L--Fire Protection

77.1100 Fire protection; training and organization.

77.1101 Escape and evacuation; plan.

77.1102 Warning signs; smoking and open flame.

77.1103 Flammable liquids; storage.

77.1104 Accumulations of combustibile materials.

77.1105 Internal combustion engines; fueling.

77.1106 Battery charging stations; ventilation.

77.1107 Belt conveyors.

77.1108 Firefighting equipment; requirements; general.

77.1108-1 Type and capacity of firefighting equipment.

77.1109 Quantity and location of firefighting equipment.

77.1110 Examination and maintenance of firefighting equipment.

77.1111 Welding, cutting, soldering; use of fire extinguisher.

77.1112 Welding, cutting, soldering with arc or flame; safeguards.

Subpart M--Maps

- 77.1200 Mine map.
- 77.1201 Certification of mine maps.
- 77.1202 Availability of mine map.

Subpart N--Explosives and Blasting

- 77.1300 Explosives and blasting.
- 77.1301 Explosives; magazines.
- 77.1302 Vehicles used to transport explosives.
- 77.1303 Explosives; handling and use.
- 77.1304 Blasting agents; special provisions.

Subpart O--Personnel Hoisting

- 77.1400 Personnel hoists and elevators.
- 77.1401 Automatic controls and brakes.
- 77.1402 Rated capacity.
- 77.1402-1 Maximum load; posting.
- 77.1403 Daily examination of hoisting equipment.
- 77.1404 Certifications and records of daily examinations.
- 77.1405 Operation of hoisting equipment after repairs.

WIRE ROPES

- 77.1430 Wire ropes; scope.
- 77.1431 Minimum rope strength.
- 77.1432 Initial measurement.
- 77.1433 Examinations.
- 77.1434 Retirement criteria.
- 77.1435 Load end attachments.
- 77.1436 Drum end attachment.
- 77.1437 End attachment retermination.
- 77.1438 End attachment replacement.

Subpart P--Auger Mining

- 77.1500 Auger mining; planning.
- 77.1501 Auger mining; inspections.
- 77.1502 Auger holes; restriction against entering.
- 77.1503 Augering equipment; overhead protection.
- 77.1504 Auger equipment; operation.

77.1505 Auger holes; blocking.

Subpart Q--Loading and Haulage

77.1600 Loading and haulage; general.

77.1601 Transportation of persons; restrictions.

77.1602 Use of aerial tramways to transport persons.

77.1603 Trains and locomotives; authorized persons.

77.1604 Transportation of persons; overcrowding.

77.1605 Loading and haulage equipment; installations.

77.1606 Loading and haulage equipment; inspection and maintenance.

77.1607 Loading and haulage equipment; operation.

77.1608 Dumping facilities.

Subpart R--Miscellaneous

77.1700 Communications in work areas.

77.1701 Emergency communications; requirements.

77.1702 Arrangements for emergency medical assistance and transportation for injured persons; reporting requirements; posting requirements.

77.1703 First-Aid training; supervisory employees.

77.1704 First aid training program; availability of instruction to all miners.

77.1705 First aid training program; retraining of supervisory employees; availability to all miners.

77.1706 First aid training program; minimum requirements.

77.1707 First aid equipment; location; minimum requirements.

77.1708 Safety program, instruction of persons employed at the mine.

77.1710 Protective clothing; requirements.

77.1710-1 Distinctively colored hard hats or hard caps; identification for newly employed, inexperienced miners.

77.1711 Smoking prohibition.

77.1712 Reopening mines; notification; inspection prior to mining.

77.1713 Daily inspection of surface coal mine; certified person; reports of inspection.

Subpart S--Trolley Wires and Trolley Feeder Wires

77.1800 Cutout switches.

77.1801 Overcurrent protection.

77.1801-1 Devices for overcurrent protection.

77.1802 Insulation of trolley wires, trolley feeder wires and bare signal wires; guarding of trolley wires and trolley feeder wires.

Subpart T--Slope and Shaft Sinking

77.1900 Slopes and shafts; approval of plans.

77.1900-1 Compliance with approved slope and shaft sinking plans.

- 77.1901 Preshift and onshift inspections; reports.
- 77.1901-1 Methane and oxygen deficiency tests; approved devices.
- 77.1902 Drilling and mucking operations.
- 77.1902-1 Permissible diesel-powered equipment.
- 77.1903 Hoists and hoisting; minimum requirements.
- 77.1904 Communications between slope and shaft bottoms and hoist operators.
- 77.1905 Hoist safeguards; general.
- 77.1906 Hoists; daily inspection.
- 77.1907 Hoist construction; general.
- 77.1908 Hoist installations; use.
- 77.1908-1 Hoist operation; qualified hoistman.
- 77.1909 Explosives and blasting; use of permissible explosives and shot-firing units.
- 77.1909-1 Use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager.
- 77.1910 Explosives and blasting; general.
- 77.1911 Ventilation of slopes and shafts.
- 77.1912 Ladders and stairways.
- 77.1913 Fire-resistant wood.
- 77.1914 Electrical equipment.
- 77.1915 Storage and handling of combustible materials.
- 77.1916 Welding, cutting, and soldering; fire protection.

Subpart U--Approved Books and Records [Reserved]

AUTHORITY: 30 U.S.C. 811 , 957 , and 961 .
SOURCE: 36 FR 9364, May 22, 1971, unless otherwise noted.

(v) *Qualified person* means, as the context requires,

(1) An individual deemed qualified by the Secretary and designated by the operator to make tests and examinations required by this Part 77; and,

(2) An individual deemed, in accordance with the minimum requirements to be established by the Secretary, qualified by training, education, and experience, to perform electrical work, to maintain electrical equipment, and to conduct examinations and make tests of all electrical equipment.

(w) *Roll protection* means a framework, safety canopy, or similar protection for the operator when equipment overturns.

(x) *Safety can* means an approved container, of not over 5 gallons capacity, having a spring-closing lid and spout cover.

(y) *Safety fuse* means a train of powder enclosed in cotton, jute yarn, and waterproofing compounds, which burns at a uniform rate; used for firing a cap containing the detonating compound which in turn sets off the explosive charge.

(z) *Safety switch* means a sectionalizing switch that also provides shunt protection in blasting circuits between the blasting switch and the shot area.

(aa) *Secretary* means the Secretary of Labor or his delegate.

[36 FR 9364, May 22, 1971, as amended at 43 FR 12320, Mar. 24, 1978]

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.214
Refuse piles; general.

- (a) Refuse piles constructed on or after July 1, 1971, shall be located in areas which are a safe distance from all underground mine airshafts, preparation plants, tipples, or other surface installations and such piles shall not be located over abandoned openings or steamlines.
- (b) Where new refuse piles are constructed over exposed coal beds the exposed coal shall be covered with clay or other inert material as the piles are constructed.
- (c) A fireproof barrier of clay or inert material shall be constructed between old and new refuse piles.
- (d) Roadways to refuse piles shall be fenced or otherwise guarded to restrict the entrance of unauthorized persons.

[36 FR 9364, May 22, 1971, as amended at 36 FR 13143, July 15, 1971]

Title 30 Parts 1-199 Mineral Resources
Department of Labor
Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.215-1
Refuse piles; identification.

A permanent identification marker, at least six feet high and showing the refuse pile identification number as assigned by the District Manager, the name associated with the refuse pile and the name of the person owning, operating or controlling the refuse pile, shall be located on or immediately adjacent to each refuse pile within the time specified in paragraphs (a) or (b) of this section as applicable.

(a) For existing refuse piles, markers shall be placed before May 1, 1976.

(b) For new or proposed refuse piles, markers shall be placed within 30 days from acknowledgment of the proposed location of a new refuse pile.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957))

[40 FR 41776, Sept. 9, 1975]

Title 30 Parts 1-199 Mineral Resources
Department of Labor
Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.215-2**Refuse piles; reporting requirements.**

- (a) The proposed location of a new refuse pile shall be reported to and acknowledged in writing by the District Manager prior to the beginning of any work associated with the construction of the refuse pile.
- (b) Before May 1, 1976, for existing refuse piles, or within 180 days from the date of acknowledgment of the proposed location of a new refuse pile, the person owning, operating or controlling a refuse pile shall submit to the District Manager a report in triplicate which contains the following:
- (1) The name and address of the person owning, operating or controlling the refuse pile; the name associated with the refuse pile; the identification number of the refuse pile as assigned by the District Manager; and the identification number of the mine or preparation plant as assigned by MSHA.
 - (2) The location of the refuse pile indicated on the most recent USGS 7 1/2 minute or 15 minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.
 - (3) A statement of the construction history of the refuse pile, and a statement indicating whether the refuse pile has been abandoned in accordance with a plan approved by the District Manager.
 - (4) A topographic map showing at a scale not to exceed 1 inch=400 feet, the present and proposed maximum extent of the refuse pile and the area 500 feet around the proposed maximum perimeter.
 - (5) A statement of whether or not the refuse pile is burning.
 - (6) A description of measures taken to prevent water from being impounded by the refuse pile or contained within the refuse pile.
 - (7) At a scale not to exceed 1 inch=100 feet, cross sections of the length and width of the refuse pile at sufficient intervals to show the approximate original ground surface, the present configuration and the proposed maximum extent of the refuse pile, and mean sea level elevations at significant points.
 - (8) Any other information pertaining to the stability of the pile which may be required by the District Manager.
- (c) The information required by paragraphs (b)(4) through (b)(8) of this section shall be reported every twelfth month from the date of original submission for those refuse piles which the District Manager has determined can present a hazard until the District Manager notifies the operator that the hazard has been eliminated.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957), Pub. L. No. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[40 FR 41776, Sept. 9, 1975, as amended at 47 FR 14696, Apr. 6, 1982; 57 FR 7471, Mar. 2, 1992; 60 FR 33719, June 29, 1995]

Title 30 Parts 1-199 Mineral Resources
Department of Labor
Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.215-3

Refuse piles: certification.

(a) Within 180 days following written notification by the District Manager that a refuse pile can present a hazard, the person owning, operating, or controlling the refuse pile shall submit to the District Manager a certification by a registered engineer that the refuse pile is being constructed or has been modified in accordance with current, prudent engineering practices to minimize the probability of impounding water and failure of such magnitude as to endanger the lives of miners.

(b) After the initial certification required by this section and until the District Manager notifies the operator that the hazard has been eliminated, certification shall be submitted every twelfth month from the date of the initial certification.

(c) Certifications required by paragraphs (a) and (b) of this section shall include all information considered in making the certification.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957))

[40 FR 41776, Sept. 9, 1975, as amended at 57 FR 7471, Mar. 2, 1992]

for completion of such work.

(18) Such other information pertaining to the stability of the impoundment and impounding structure which may be required by the District Manager.

(b) Any changes or modifications to plans for water, sediment, or slurry impoundments or impounding structures shall be approved by the District Manager prior to the initiation of such changes or modifications.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957))

[40 FR 41777, Sept. 9, 1975]

Title 30
Code of Federal Regulations

Parts 1-198 Mineral Resources
Department of Labor
Mine Safety and Health Administration

30 CFR § 77.216-3**Water, sediment, or slurry impoundments and impounding structures; inspection requirements; correction of hazards; program requirements.**

(a) All water, sediment, or slurry impoundments that meet the requirements of §77.216(a) shall be examined as follows:

(1) At intervals not exceeding 7 days, or as otherwise approved by the District Manager, for appearances of structural weakness and other hazardous conditions.

(2) All instruments shall be monitored at intervals not exceeding 7 days, or as otherwise approved by the District Manager.

(3) Longer inspection or monitoring intervals approved under this paragraph (a) shall be justified by the operator based on the hazard potential and performance of the impounding structure, and shall include a requirement for inspection immediately after a specified rain event approved by the District Manager.

(4) All inspections required by this paragraph (a) shall be performed by a qualified person designated by the person owning, operating, or controlling the impounding structure.

(b) When a potentially hazardous condition develops, the person owning, operating or controlling the impounding structure shall immediately:

(1) Take action to eliminate the potentially hazardous condition;

(2) Notify the District Manager;

(3) Notify and prepare to evacuate, if necessary, all coal miners from coal mine property which may be affected by the potentially hazardous conditions; and

(4) Direct a qualified person to monitor all instruments and examine the structure at least once every eight hours, or more often as required by an authorized representative of the Secretary.

(c) After each examination and instrumentation monitoring referred to in paragraphs (a) and (b) of this section, each qualified person who conducted all or any part of the examination or instrumentation monitoring shall promptly record the results of such examination or instrumentation monitoring in a book which shall be available at the mine for inspection by an authorized representative of the Secretary, and such qualified person shall also promptly report the results of the examination or monitoring to one of the persons specified in paragraph (d) of this section.

(d) All examination and instrumentation monitoring reports recorded in accordance with paragraph (c) of this section shall include a report of the action taken to abate hazardous conditions and shall be promptly signed or countersigned by at least one of the following persons:

(1) The mine foreman;

(2) The assistant superintendent of the mine;

(3) The superintendent of the mine;

(4) The person designated by the operator as responsible for health and safety at the mine.

(e) Before May 1, 1976, the person owning, operating, or controlling a water, sediment, or slurry impoundment which meets the requirements of §77.216(a) shall adopt a program for carrying out the requirements of paragraphs (a) and (b) of this section. The program shall be submitted for approval to the District Manager. The program shall include as a minimum:

(1) A schedule and procedures for examining the impoundment and impounding structure by a designated qualified person;

(2) A schedule and procedures for monitoring any required or approved instrumentation by a designated qualified person;

(3) Procedures for evaluating hazardous conditions;

(4) Procedures for eliminating hazardous conditions;

(5) Procedures for notifying the District Manager;

(6) Procedures for evacuating coal miners from coal mine property which may be affected by the hazardous condition.

(f) Before making any changes or modifications in the program approved in accordance with paragraph (e) of this section, the person owning, operating, or controlling the impoundment shall obtain approval of such changes or modifications from the District Manager.

(g) The qualified person or persons referred to in paragraphs (a), (b)(4), (c), (e)(1), and (e)(2) of this section shall be trained to recognize specific signs of structural instability and other hazardous conditions by visual observation and, if applicable, to monitor instrumentation.

(Secs. 101, 508, Pub. L. 91-173, 83 Stat. 745, 803 (30 U.S.C. 811, 957))

[40 FR 41777, Sept. 9, 1975, as amended at 57 FR 7471, Mar. 2, 1992]

Title 30 **Part 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.216-4**Water, sediment or slurry impoundments and impounding structures; reporting requirements; certification.**

(a) Except as provided in paragraph (b) of this section, every twelfth month following the date of the initial plan approval, the person owning, operating, or controlling a water, sediment, or slurry impoundment and impounding structure that has not been abandoned in accordance with an approved plan shall submit to the District Manager a report containing the following information:

- (1) Changes in the geometry of the impounding structure for the reporting period.
- (2) Location and type of installed instruments and the maximum and minimum recorded readings of each instrument for the reporting period.
- (3) The minimum, maximum, and present depth and elevation of the impounded water, sediment, or slurry for the reporting period.
- (4) Storage capacity of the impounding structure.
- (5) The volume of the impounded water, sediment, or slurry at the end of the reporting period.
- (6) Any other change which may have affected the stability or operation of the impounding structure that has occurred during the reporting period.
- (7) A certification by a registered professional engineer that all construction, operation, and maintenance was in accordance with the approved plan.

(b) A report is not required under this section when the operator provides the District Manager with a certification by a registered professional engineer that there have been no changes under paragraphs (1) through (6) of this section to the impoundment or impounding structure. However, a report containing the information set out in paragraph of this section shall be submitted to the District Manager at least every 5 years.

[57 FR 7471, Mar. 2, 1992]

(d)(1)(iv) J 396 or J 396a, "Minimum Performance Criteria for Rollover Protective Structures for Motor Graders"; or

(d)(1)(v) J 167, "Protective Frame with Overhead Protection--Test Procedures and Performance Requirements"; or

(d)(1)(vi) J 334a, "Protective Frame Test Procedures and Performance Requirements"; or

(2) The ROPS and supporting attachments will:

(d)(2)(i) Show satisfactory performance by actual test of a prototype involving a roll of 720° or more; or

(d)(2)(ii) Support not less than the weight of the vehicle applied as a uniformly distributed horizontal load at the top of the structure and perpendicular to a vertical plane through the longitudinal axis of the prime mover, and support two times the weight of the vehicle applied as a uniformly distributed vertical load to the top of the structure; 1 or

1 Paragraph (d) of § 77.403-1 is based on the ROPS criteria of the U.S. Army Corps of Engineers, Safety General Safety--Requirements EM 385-1-1, Change 1, No. 21, Para. 18.A.20 (March 27, 1972), except that subparagraph (2)(ii) of this paragraph (d) is substituted for Para. 18.A.20e(2) of the Corps requirements.

(d)(2)(iii) Support the following separately applied minimum loads:

(d)(2)(iii)(A) 125 percent of the weight of the vehicle applied as a uniformly distributed horizontal load at the top of the ROPS and perpendicular to a critical plane through the longitudinal axis of the prime mover; and

(d)(2)(iii)(B) A load of twice the weight of the vehicle applied as a uniformly distributed vertical load to the top of the ROPS after complying with paragraph (d)(1)(iii)(A) of this section. Stresses shall not exceed the ultimate strength. Steel used in the ROPS must have capability to perform at 0° F., or exhibit Charpy V-notch impact strength at 8 ft.-lb. at -20° F. with a standard Charpy V-notch Type A specimen and provide 20 percent elongation over two inches in a standard two inch gauge length on a 0.505 inch diameter tensile specimen. Bolts and nuts shall be SAE grade 8 (reference SAE J 429d, J 429e, J 429f or J 429g and J 995, J 995a or J 995b).

(e) *Mobile equipment manufactured prior to September 1, 1974 meeting certain existing governmental requirements for ROPS.* Mobile equipment described in paragraph (a) of this section, manufactured prior to September 1, 1974 and already equipped with ROPS, shall be deemed in compliance with this section if it meets the ROPS requirements of the State of California, the U.S. Army Corps of Engineers, the Bureau of Reclamation of the U.S. Department of the Interior in effect on April 5, 1972, or the Occupational Safety and Health Administration, U.S. Department of Labor. The requirements in effect are:

(1) State of California: Construction Safety Orders 1591(i), 1596, and Logging and Sawmill Safety Order 5243, issued by the Department of Industrial Relations pursuant to Division 5, Labor Code §6312, State of California;

(2) U.S. Army Corps of Engineers: Safety--General Safety Requirements, EM-385-1-1 (March 1967);

(3) Bureau of Reclamation, U.S. Department of the Interior: Safety and Health Regulations for Construction, Part II (September 1971); and

(4) Occupational Safety and Health Administration, U.S. Department of Labor: Safety and Health Regulations for Construction, 29 CFR 1926.1001 and 1926.1002.

(f) Field welding on ROPS shall be performed by welders who are certified by the coal mine operator or equipment distributor as being qualified in accordance with the American Welding Society Structural Welding Code AWS D1.1-73, or Military Standard MIL-STD 248, or the equivalent thereof.

(g) Seat belts required by §77.1710(i) shall be worn by the operator of mobile equipment required to be equipped with ROPS by §77.403-1.

(§ 101(a), Federal Coal Mine Health and Safety Act of 1969, as amended (83 Stat. 745; 30 U.S.C. 811(a))

[39 FR 24007, June 28, 1974]

Title 30 Parts 1-199 Mineral Resources
Department of Labor
Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.403-2
Incorporation by reference.

In accordance with 5 U.S.C. 552(a), the publications to which references are made in §§77.403 and 77.403-1 and which have been prepared by organizations other than the Mine Safety and Health Administration (MSHA), are hereby incorporated by reference and made a part hereof. The incorporated publications are available at each Coal Mine Safety and Health district office of MSHA. The U.S. Army Corps of Engineers, Safety--General Safety Requirements and the Occupational Safety and Health Administration regulations are also available from the U.S. Government Printing Office, Washington, DC 20402. Bureau of Reclamation Safety and Health Regulations for Construction are available from the Bureau of Reclamation, Division of Safety, Engineering and Research Center, Denver, Colorado. SAE documents are available from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096. American Welding Society Structural Welding Code D1-1-73 is available from the American Welding Society, Inc., 550 N.W. LeJeune Road, Miami, FL 33126. Military Standard MIL-STD 248 is available from the Information Dissemination (Superintendent of Documents), P.O. Box 371954, Pittsburgh, PA 15250-7954; Telephone: 866-512-1800 (toll free) or 202-512-1800; <http://bookstore.gpo.gov>.

(§ 101(a), the Federal Coal Mine Health and Safety Act of 1969, as amended (83 Stat. 745; 30 U.S.C. 811(a))

[39 FR 24008, June 28, 1974; 60 FR 35692, July 11, 1995]

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.409
Shovels, draglines, and tractors.

(a) Shovels, draglines, and tractors shall not be operated in the presence of any person exposed to a hazard from its operation and all such equipment shall be provided with an adequate warning device which shall be sounded by the operator prior to starting operation.

(b) Shovels and draglines shall be equipped with handrails along and around all walkways and platforms.

Title 30 Parts 1-199 Mineral Resources
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.601

Trailing cables or portable cables; temporary splices.

Temporary splices in trailing cables or portable cables shall be made in a workmanlike manner and shall be mechanically strong and well insulated. Trailing cables or portable cables with exposed wires or splices that heat or spark under load shall not be used.

Title 30 **Part 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.602
Permanent splicing of trailing cables.

When permanent splices in trailing cables are made, they shall be:

- (a) Mechanically strong with adequate electrical conductivity;
- (b) Effectively insulated and sealed so as to exclude moisture; and,
- (c) Vulcanized or otherwise made with suitable materials to provide good bonding to the outer jacket.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.604
Protection of trailing cables.

Trailing cables shall be adequately protected to prevent damage by mobile equipment.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.606
Energized trailing cables; handling.

Energized medium- and high-voltage trailing cables shall be handled only by persons wearing protective rubber gloves (see [§77.606-1](#)) and, with such other protective devices as may be necessary and appropriate under the circumstances.

Title 30 **Part 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.606-1
Rubber gloves; minimum requirements.

- (a) Rubber gloves (lineman's gloves) worn while handling high-voltage trailing cables shall be rated at least 20,000 volts and shall be used and tested in accordance with the provisions of §§77.704-6 through 77.704-8.
- (b) Rubber gloves (wireman's gloves) worn while handling trailing cables energized by 660 to 1,000 volts shall be rated at least 1,000 volts and shall not be worn inside out or without protective leather gloves.
- (c) Rubber gloves shall be inspected for defects before use on each shift and at least once thereafter during the shift when such rubber gloves are used for extended periods. All protective rubber gloves which contain defects shall be discarded and replaced prior to handling energized cables.

Subpart H--Grounding

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1000
Highwalls, pits and spoil banks; plans.

Each operator shall establish and follow a ground control plan for the safe control of all highwalls, pits and spoil banks to be developed after June 30, 1971, which shall be consistent with prudent engineering design and will insure safe working conditions. The mining methods employed by the operator shall be selected to insure highwall and spoil bank stability.

Mine Safety and Health Administration
MSHA • Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 Parts 1-199 Mineral Resources
Department of Labor
Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1000-1
Filing of plan.

The operator shall file a copy of such plan, and revisions thereof, with the MSHA Coal Mine Safety and Health district office for the district in which the mine is located, and shall identify the name and location of the mine; the Mine Safety and Health Administration identification number if known; and the name and address of the mine operator.

(Approved by the Office of Management and Budget under control number 1219-0026) [Removed]

(Pub. L. No. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[36 FR 9364, May 22, 1971, as amended at 47 FR 14696, Apr. 6, 1982; 60 FR 33719, June 29, 1995]

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1001
Stripping; loose material.

Loose hazardous material shall be stripped for a safe distance from the top of pit or highwalls, and the loose unconsolidated material shall be sloped to the angle of repose, or barriers, baffle boards, screens, or other devices be provided that afford equivalent protection.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 Parts 1-199 Mineral Resources
Department of Labor
Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1003
Benches.

To insure safe operation, the width and height of benches shall be governed by the type of equipment to be used and the operation to be performed.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978


 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1011
Drill holes; guarding.

Drill holes large enough to constitute a hazard shall be covered or guarded.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1013
Air drills; safeguards.

Air shall be turned off and bled from the air hoses before hand-held air drills are moved from one working area to another.

Subpart L--Fire Protection

Title 30 Parts 1-199 Mineral Resources
Department of Labor
Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1200
Mine map.

The operator shall maintain an accurate and up-to-date map of the mine, on a scale of not less than 100 nor more than 500 feet to the inch, at or near the mine, in an area chosen by the mine operator, with a duplicate copy on file at a separate and distinct location, to minimize the danger of destruction by fire or other hazard. The map shall show:

- (a) Name and address of the mine;
- (b) The property or boundary lines of the active areas of the mine;
- (c) Contour lines passing through whole number elevations of the coalbed being mined. The spacing of such lines shall not exceed 25-foot elevation levels, except that a broader spacing of contour lines may be approved by the District Manager for steeply pitching coalbeds. Contour lines may be placed on overlays or tracings attached to mine maps.
- (d) The general elevation of the coalbed or coalbeds being mined, and the general elevation of the surface;
- (e) Either producing or abandoned oil and gas wells located on the mine property;
- (f) The location and elevation of any body of water dammed or held back in any portion of the mine: *Provided, however,* Such bodies of water may be shown on overlays or tracings attached to the mine maps;
- (g) All prospect drill holes that penetrate the coalbed or coalbeds being mined on the mine property;
- (h) All auger and strip mined areas of the coalbed or coalbeds being mined on the mine property together with the line of maximum depth of holes drilled during auger mining operations.
- (i) All worked out and abandoned areas;
- (j) The location of railroad tracks and public highways leading to the mine, and mine buildings of a permanent nature with identifying names shown;
- (k) Underground mine workings underlying and within 1,000 feet of the active areas of the mine;
- (l) The location and description of at least two permanent base line points, and the location and description of at least two permanent elevation bench marks used in connection with establishing or referencing mine elevation surveys; and,
- (m) The scale of the map.

Title 30 Parts 1-199 Mineral Resources
Department of Labor
Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1303
Explosives, handling and use.

- (a) Persons who use or handle explosives or detonators shall be experienced men who understand the hazards involved; trainees shall do such work only under the supervision of and in the immediate presence of experienced men.
- (b) Blasting operations shall be under the direct control of authorized persons.
- (c) Substantial nonconductive closed containers shall be used to carry explosives, other than blasting agents to the blasting site.
- (d) Damaged or deteriorated explosives or detonators shall be destroyed in a safe manner.
- (e) Where electric blasting is to be performed, electric circuits to equipment in the immediate area to be blasted shall be deenergized before explosives or detonators are brought into the area; the power shall not be turned on again until after the shots are fired.
- (f) Explosives shall be kept separated from detonators until charging is started.
- (g) Areas in which charged holes are awaiting firing shall be guarded, or barricaded and posted, or flagged against unauthorized entry.
- (h) Ample warning shall be given before blasts are fired. All persons shall be cleared and removed from the blasting area unless suitable blasting shelters are provided to protect men endangered by concussion or flyrock from blasting.
- (i) Lead wires and blasting lines shall not be strung across power conductors, pipelines, railroad tracks, or within 20 feet of bare powerlines. They shall be protected from sources of static or other electrical contact.
- (j) For the protection of underground workers, special precautions shall be taken when blasting in close proximity to underground operations, and no blasting shall be done that would be hazardous to persons working underground.
- (k) Holes shall not be drilled where there is danger of intersecting a charged or misfired hole.
- (l) Only wooden or other nonsparking implements shall be used to punch holes in an explosive cartridge.
- (m) Tamping poles shall be blunt and squared at one end and made of wood, nonsparking material, or of special plastic acceptable to the Mine Safety and Health Administration.
- (n) Delay connectors for firing detonating cord shall be treated and handled with the same safety precautions as blasting caps and electric detonators.
- (o) Capped primers shall be made up at the time of charging and as close to the blasting site as conditions allow.
- (p) A capped primer shall be prepared so that the detonator is contained securely and is completely embedded within the explosive cartridge.
- (q) No tamping shall be done directly on a capped primer.
- (r) Detonating cord shall not be used if it has been kinked, bent, or otherwise handled in such a manner that the train of detonation may be interrupted.
- (s) Fuse shall not be used if it has been kinked, bent sharply, or handled roughly in such a manner that the train of deflagration may be interrupted.
- (t) Blasting caps shall be crimped to fuses only with implements designed for that specific purpose.
- (u) When firing from 1 to 15 blast-holes with safety fuse ignited individually using hand-held lighters, the fuses shall be of such lengths to provide the minimum burning time specified in the following table for a particular size round:

+-----+-----+-----+

Number of holes in a round	Minimum burning time, minutes
1.....	2
2 to 5.....	2 2/3
6 to 10.....	3 1/3
11 to 15.....	5

In no case shall any 40-second-per-foot safety fuse less than 36 inches long or any 30-second-per-foot safety fuse less than 48 inches long be used.

(v) The burning rate of the safety fuse in use at any time shall be measured, posted in conspicuous locations, and brought to the attention of all men concerned with blasting.

(w) Electric detonators of different brands shall not be used in the same round.

(x) Adequate priming shall be employed to guard against misfires, increased toxic fumes, and poor performance.

(y) Except when being tested with a blasting galvanometer:

(y)(1) Electric detonators shall be kept shunted until they are being connected to the blasting line or wired into a blasting round.

(y)(2) Wired rounds shall be kept shunted until they are being connected to the blasting line.

(y)(3) Blasting lines shall be kept shunted until immediately before blasting.

(z) Completely wired rounds shall be tested with a blasting galvanometer before connections are made to the blasting line.

(aa) Permanent blasting lines shall be properly supported, insulated, and kept in good repair.

(bb) At least a 5-foot airgap shall be provided between the blasting circuit and the power circuit.

(cc) When instantaneous blasting is performed, the double-trunkline or loop system shall be used in detonating-cord blasting.

(dd) When instantaneous blasting is performed, trunklines, in multiple-row blasts, shall make one or more complete loops, with crossties between loops at intervals of not over 200 feet.

(ee) All detonating cord knots shall be tight and all connections shall be kept at right angles to the trunklines.

(ff) Power sources shall be suitable for the number of electrical detonators to be fired and for the type of circuits used.

(gg) Electric circuits from the blasting switches to the blast area shall not be grounded.

(hh) Safety switches and blasting switches shall be labeled, encased in boxes, and arranged so that the covers of the boxes cannot be closed with the switches in the through-circuit or firing position.

(ii) Blasting switches shall be locked in the open position, except when closed to fire the blast. Lead wires shall not be connected to the blasting switch until the shot is ready to be fired.

(jj) The key or other control to an electrical firing device shall be entrusted only to the person designated to fire the round or rounds.

(kk) If branch circuits are used when blasts are fired from power circuits, safety switches located at safe distances from the blast areas shall be provided in addition to the main blasting switch.

(ll) Misfires shall be reported to the proper supervisor and shall be disposed of safely before any other work is performed in that blasting area.

(mm) When safety fuse has been used, men shall not return to misfired holes for at least 30 minutes.

(nn) When electric blasting caps have been used, men shall not return to misfired holes for at least 15 minutes.

(oo) If explosives are suspected of burning in a hole, all persons in the endangered area shall move to a safe location and no one should return to the hole until the danger has passed, but in no case within 1 hour.

(pp) Blasted areas shall be examined for undetonated explosives after each blast and undetonated explosives found shall be disposed of safely.

(qq) Blasted areas shall not be reentered by any person after firing until such time as concentrations of smoke, dust, or fumes have been reduced to safe limits.

(rr) In secondary blasting, if more than one shot is to be fired at one time, blasting shall be done electrically or with detonating cord.

(ss) Unused explosives and detonators shall be moved to a safe location as soon as charging operations are completed.

(tt) When electric detonators are used, charging shall be stopped immediately when the presence of static electricity or stray currents is detected; the condition shall be remedied before charging is resumed.

(uu) When electric detonators are used, charging shall be suspended and men withdrawn to a safe location upon the approach of an electrical storm.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1502
Auger holes; restriction against entering.

No person shall be permitted to enter an auger hole except with the approval of the MSHA Coal Mine Safety and Health District Manager of the district in which the mine is located and under such conditions as may be prescribed by such managers.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1604
Transportation of persons; overcrowding.

- (a) No man-trip vehicle or other conveyance used to transport persons to and from work areas at surface coal mines shall be overcrowded and all persons shall ride in a safe position.
- (b) Supplies, materials, and tools other than small handtools shall not be transported with men in man-trip vehicles unless such vehicles are specifically designed to make such transportation safe.

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1606

Loading and haulage equipment; inspection and maintenance.

- (a) Mobile loading and haulage equipment shall be inspected by a competent person before such equipment is placed in operation. Equipment defects affecting safety shall be recorded and reported to the mine operator.
- (b) Carriers on aerial tramways, including loading and unloading mechanisms, shall be inspected each shift; brakes shall be inspected daily; ropes and supports shall be inspected as recommended by the manufacturer or as physical conditions warrant. Equipment defects affecting safety shall be reported to the mine operator.
- (c) Equipment defects affecting safety shall be corrected before the equipment is used.

(x) Persons shall wear safety belts when dropping railroad cars.

(y) Railcars shall not be left on sidetracks unless ample clearance is provided for traffic on adjacent tracks.

(z) Parked railcars, unless held effectively by brakes, shall be blocked securely.

(aa) Railroad cars and all trucks shall be trimmed properly when they have been loaded higher than the confines of their cargo space.

(bb) When the entire length of a conveyor is visible from the starting switch, the operator shall visually check to make certain that all persons are in the clear before starting the conveyor. When the entire length of the conveyor is not visible from the starting switch, a positive audible or visible warning system shall be installed and operated to warn persons that the conveyor will be started.

(cc) Unguarded conveyors with walkways shall be equipped with emergency stop devices or cords along their full length.

(dd) Adequate backstops or brakes shall be installed on inclined-conveyor drive units to prevent conveyors from running in reverse if a hazard to personnel would be caused.

(ee) Aerial tram conveyor buckets shall not be overloaded, and feed shall be regulated to prevent spillage.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1608
Dumping facilities.

- (a) Dumping locations and haulage roads shall be kept reasonably free of water, debris, and spillage.
- (b) Where the ground at a dumping place may fail to support the weight of a loaded dump truck, trucks shall be dumped a safe distance back from the edge of the bank.
- (c) Adequate protection shall be provided at dumping locations where persons may be endangered by falling material.
- (d) Grizzlies, grates, and other sizing devices at dump and transfer points shall be anchored securely in place.
- (e) If truck spotters are used, they shall be well in the clear while trucks are backing into dumping position and dumping; lights shall be used at night to direct trucks.

Subpart R--Miscellaneous

Title 30 Parts 1-199 Mineral Resources
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1702**Arrangements for emergency medical assistance and transportation for injured persons; reporting requirements; posting requirements.**

(a) Each operator of a surface coal mine shall make arrangements with a licensed physician, medical service, medical clinic, or hospital to provide 24-hour emergency medical assistance for any person injured at the mine.

(b) Each operator shall make arrangements with an ambulance service, or otherwise provide for 24-hour emergency transportation for any person injured at the mine.

(c) Each operator shall, on or before September 30, 1971, report to the Coal Mine Health and Safety District Manager for the district in which the mine is located the name, title and address of the physician, medical service, medical clinic, hospital, or ambulance service with whom arrangements have been made, or otherwise provided, in accordance with the provisions of paragraphs (a) and (b) of this section.

(d) Each operator shall, within 10 days after any change of the arrangements required to be reported under the provisions of this section, report such changes to the Coal Mine Health and Safety District Manager. If such changes involve a substitution of persons, the operator shall provide the name, title, and address of the person substituted together with the name and address of the medical service, medical clinic, hospital, or ambulance service with which such person or persons are associated.

(e) Each operator shall, immediately after making an arrangement required under the provisions of paragraphs (a) and (b) of this section, or immediately after any change, of such agreement, post at appropriate places at the mine the names, titles, addresses, and telephone numbers of all persons or services currently available under such arrangements to provide medical assistance and transportation at the mine.

(Pub. L. No. 96-511, 94 Stat. 2812 (44 U.S.C. 3501 et seq.))

[36 FR 9364, May 22, 1971, as amended at 36 FR 13143, July 15, 1971; 47 FR 14696, Apr. 6, 1982; 60 FR 33719, June 29, 1995]

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1703
First-Aid training; supervisory employees.

The mine operator shall conduct first-aid training courses for selected supervisory employees at the mine. Within 60 days after the selection of a new supervisory employee to be so trained, the mine operator shall certify by signature and date the name of the employee and date on which the employee satisfactorily completed the first-aid training course. The certification shall be kept at the mine and made available on request to an authorized representative of the Secretary.

[56 FR 1478, Jan. 14, 1991]

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1704

First aid training program; availability of instruction to all miners.

On or before December 30, 1971, each operator of a surface coal mine shall make available to all miners employed in the mine a course of instruction in first aid conducted by the operator or under the auspices of the operator, and such a course of instruction shall be made available to newly employed miners within 6 months after the date of employment.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 Parts 1-199 Mineral Resources
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations


30 CFR § 77.1705

First aid training program; retraining of supervisory employees; availability to all miners.

Beginning January 1, 1972, each operator of a surface coal mine shall conduct refresher first aid training programs each calendar year for all selected supervisory employees and make available refresher first aid training courses to all miners employed in the mine.

[36 FR 9364, May 22, 1971, as amended at 36 FR 13143, July 15, 1971]

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1706
First aid training program; minimum requirements.

(a) All first aid training programs required under the provisions of §§77.1703 and 77.1704 shall include 10 class hours of training in a course of instruction similar to that outlined in "First Aid, A Bureau of Mines Instruction Manual."

(b) Refresher first aid training programs required under the provisions of §77.1705 shall include 5 class hours of refresher training in a course of instruction similar to that outlined in "First Aid, A Bureau of Mines Instruction Manual."

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page


Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1708
Safety program; instruction of persons employed at the mine.

On or before September 30, 1971, each operator of a surface coal mine shall establish and maintain a program of instruction with respect to the safety regulations and procedures to be followed at the mine and shall publish and distribute to each employee, and post in conspicuous places throughout the mine, all such safety regulations and procedures established in accordance with the provisions of this section.

[36 FR 9364, May 22, 1971, as amended at 36 FR 13143, July 15, 1971]

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Part 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1710-1

Distinctively colored hard hats or hard caps; identification for newly employed, inexperienced miners.

Hard hats or hard caps distinctively different in color from those worn by experienced miners shall be worn at all times by each newly employed, inexperienced miner when working in or around a mine or plant for at least one year from the date of his initial employment as a miner or until he has been qualified or certified as a miner by the State in which he is employed.

(§ 101(a), Federal Coal Mine Health and Safety Act of 1969, as amended (83 Stat. 745; 30 U.S.C. 811(a))

[39 FR 7176, Feb. 25, 1974]

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1711
Smoking prohibition.

No person shall smoke or use an open flame where such practice may cause a fire or explosion.

Mine Safety and Health Administration
MSHA - Protecting Miners' Safety and Health Since 1978

 Help Printing This Page

Title 30 **Parts 1-199 Mineral Resources**
 Department of Labor
 Mine Safety and Health Administration
Code of Federal Regulations

30 CFR § 77.1712
Reopening mines; notification; inspection prior to mining.

Prior to reopening any surface coal mine after it has been abandoned or declared inactive by the operator, the operator shall notify the Coal Mine Health and Safety District Manager for the district in which the mine is located, and an inspection of the entire mine shall be completed by an authorized representative of the Secretary before any mining operations in such mine are instituted.

