

# COMPLETE SAFETY SOLUTIONS




In mid-2006 in response to twelve miners losing their lives in a highly publicized underground coal mine mishap, the Pennsylvania Department of Environmental Protection announced it would take



steps to enable the District Mining Operations Inspectors to enforce Federal mine safety regulations. By late 2008 the processes required to authorize this within the State were completed. The Federal regulations were included in the new state regulations by reference, meaning the state law only references the federal regulation numbers and does not restate the actual language, allowing the state regulation to be automatically updated

when the federal law changes. However, if you read the State Regulations you get only numbers and no specifics. In addition, not all of the federal regulations were chosen to be enforced on the state level, so it can get confusing.

This E-Z Compliance Helper is meant to make it easier to see which regulations the State DEP inspector has the authority to specifically cite. It was constructed from a listing kindly provided by DEP but adds a number of features to make working with these regulations easier. First all state regulations and their cross references are listed. Then the listing is repeated adding the entire federal regulation language as of the date of this edition listed at the end of the document. This document is available on paper or electronically. The electronic edition includes links directly to the MSHA regulation which also give you access to MSHA policy statements. When a regulation includes a policy statement explaining how MSHA enforces it you will find a link that takes you to that policy.

## ***PENNSYLVANIA DEP / MSHA REGULATION CROSS REFERENCE*** ***Surface Metal / Nonmetal – PA 209A. / MSHA 30 CFR § 56***

### **Subpart B – GROUND CONTROL**

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**Wall, bank, and slope stability** PA 209a23(2) / [30 CFR § 56.3130](#)  
**Pit or quarry wall perimeter** 209a23(3) / [30 CFR § 56.3131](#)

#### *Scaling and Support*

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**PENNSYLVANIA DEP / MSHA REGULATION CROSS REFERENCE**  
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**Subpart B – GROUND CONTROL**

*Mining Methods*

**Wall, bank, and slope stability**

**PA 209a23(2) / [30 CFR § 56.3130](#)**

Mining methods shall be used that will maintain wall, bank, and slope stability in places where persons work or travel in performing their assigned tasks. When benching is necessary, the width and height shall be based on the type of equipment used for cleaning of benches or for scaling of walls, banks, and slopes.

**Pit or quarry wall perimeter**

**209a23(3) / [30 CFR § 56.3131](#)**

In places where persons work or travel in performing their assigned tasks, loose or unconsolidated material shall be sloped to the angle of repose or stripped back for at least 10 feet from the top of the pit or quarry wall. Other conditions at or near the perimeter of the pit or quarry wall which create a fall-of-material hazard to persons shall be corrected.

*Scaling and Support*

**Correction hazardous conditions**

**209a23(4) / [30 CFR § 56.3200](#)**

Ground conditions that create a hazard to persons shall be taken down or supported before other work or travel is permitted in the affected area. Until corrective work is completed, the area shall be posted with a warning against entry and, when left unattended, a barrier shall be installed to impede unauthorized entry.

**Location for performing scaling**

**209a23(5) / [30 CFR § 56.3201](#)**

Scaling shall be performed from a location which will not expose persons to injury from falling material, or other protection from falling material shall be provided.

*Precautions*

**Examination of ground conditions**

**209a23(6) / [30 CFR § 56.3401](#)**

Persons experienced in examining and testing for loose ground shall be designated by the mine operator. Appropriate supervisors or other designated persons shall examine and, where applicable, test ground conditions in areas where work is to be performed prior to work commencing, after blasting, and as ground conditions warrant during the work shift. Highwalls and banks adjoining travelways shall be examined weekly or more often if changing ground conditions warrant.

**Activity between machinery or equipment and the highwall or bank** 209a23(7) / [30 CFR § 56.3430](#)

Persons shall not work or travel between machinery or equipment and the highwall or bank where the machinery or equipment may hinder escape from falls or slides of the highwall or bank. Travel is permitted when necessary for persons to dismount.

**Subpart C – FIRE PREVENTION AND CONTROL**

*Prohibitions / Precautions / Housekeeping*

**Smoking and use of open flames**

**209a24 (1) / [30 CFR § 56.4100](#)**

No person shall smoke or use an open flame where flammable or combustible liquids, including greases, or flammable gases are-- (a) Used or transported in a manner that could create a fire hazard; or (b) Stored or handled.

**Fueling internal combustion engines**

**209a24(2) / [30 CFR § 56.4103](#)**

Internal combustion engines shall be switched off before refueling if the fuel tanks are integral parts of the equipment. This standard does not apply to diesel-powered equipment.

*Firefighting Equipment*

**General requirements**

**209a24 (3) / [30 CFR § 56.4200](#)**

(a) For fighting fires that could endanger persons, each mine shall have (1) Onsite firefighting equipment for fighting fires in their early stages; and (2) Onsite firefighting equipment for fighting fires beyond their early stages, or the mine shall have made prior arrangements with a local fire department to fight such fires.

(b) This onsite firefighting equipment shall be (1) Of the type, size, and quantity that can extinguish fires of any class which could occur as a result of the hazards present; and (2) Strategically located, readily accessible, plainly marked, and maintained in fire-ready condition.

### **Self-propelled equipment**

**209a24(4) / [30 CFR § 56.4230](#)**

(a)(1) Whenever a fire or its effects could impede escape from self-propelled equipment, a fire extinguisher shall be on the equipment. (2) Whenever a fire or its effects would not impede escape from the equipment but could affect the escape of other persons in the area, a fire extinguisher shall be on the equipment or within 100 feet of the equipment.

(b) A fire suppression system may be used as an alternative to fire extinguishers if the system can be manually activated.

(c) Fire extinguishers or fire suppression systems shall be of a type and size that can extinguish fires of any class in their early stages which could originate from the equipment's inherent fire hazards. Fire extinguishers or manual actuators for the suppression system shall be located to permit their use by persons whose escape could be impeded by fire.

## **Subpart F – DRILLING AND ROTARY JET PIERCING**

### *Drilling*

#### **Equipment defects**

**209a25(1) / [30 CFR § 56.7002](#)**

Equipment defects affecting safety shall be corrected before the equipment is used.

#### **Drill area inspection**

**209a25(2) / [30 CFR § 56.7003](#)**

The drilling area shall be inspected for hazards before starting the drilling operations.

#### **Drill mast**

**209a25(3) / [30 CFR § 56.7004](#)**

Persons shall not be on a mast while the drill-bit is in operation unless they are provided with a safe platform from which to work and they are required to use safety belts to avoid falling.

#### **Augers and drill stems**

**209a25(4) / [30 CFR § 56.7005](#)**

Drill crews and others shall stay clear of augers or drill stems that are in motion. Persons shall not pass under or step over a moving stem or auger.

#### **Moving the drill**

**209a25(5) / [30 CFR § 56.7008](#)**

When a drill is being moved from one drilling area to another, drill steel, tools, and other equipment shall be secured and the mast placed in a safe position.

#### **Drill helpers**

**209a25(6) / [30 CFR § 56.7009](#)**

If a drill helper assists the drill operator during movement of a drill to a new location, the helper shall be in sight of, or in communication with, the operator at all times.

#### **Tending drills in operation**

**209a25(7) / [30 CFR § 56.7012](#)**

While in operation, drills shall be attended at all times.

#### **Loose objects, masts or platform**

**209a25(8) / [30 CFR § 56.7051](#)**

To prevent injury to personnel, tools and other objects shall not be left loose on the mast or drill platform.

#### **Drilling positions**

**209a25(9) / [30 CFR § 56.7052](#)**

Persons shall not drill from-- (a) Positions which hinder their access to the control levers; (b) Insecure footing or insecure staging; or (c) Atop equipment not suitable for drilling.

#### **Intersecting holes**

**209a25(10) / [30 CFR § 56.7055](#)**

Holes shall not be drilled where there is a danger of intersecting a misfired hole or a hole containing explosives blasting agents, or detonators.

## Subpart H – LOADING, HAULING, AND DUMPING

### *Traffic Safety*

#### **Traffic control**

**209a26(1) / [30 CFR § 56.9100](#)**

To provide for the safe movement of self-propelled mobile equipment (a) Rules governing speed, right-of-way, direction of movement, and the use of headlights to assure appropriate visibility, shall be established and followed at each mine; and (b) Signs or signals that warn of hazardous conditions shall be placed at appropriate locations at each mine.

#### **Operating speed, equip. control**

**209a26(2) / [30 CFR § 56.9101](#)**

Operators of self-propelled mobile equipment shall maintain control of the equipment while it is in motion. Operating speeds shall be consistent with conditions of roadways, tracks, grades, clearance, visibility, and traffic, and the type of equipment used.

### *Transportation of Persons and Materials*

#### **Loading, hauling large rocks**

**209a26(3) / [30 CFR § 56.9202](#)**

Large rocks shall be broken before loading if they could endanger persons or affect the stability of mobile equipment. Mobile equipment used for haulage of mined material shall be loaded to minimize spillage where a hazard to persons could be created.

### *Safety Devices, Provisions, and Procedures for Roadways, Railroads, and Loading and Dumping Sites*

#### **Berms or guardrails**

**209a26(4) / [30 CFR § 56.9300](#)**

(a) Berms or guardrails shall be provided and maintained on the banks of roadways where a drop-off exists of sufficient grade or depth to cause a vehicle to overturn or endanger persons in equipment.

(b) Berms or guardrails shall be at least mid-axle height of the largest self-propelled mobile equipment which usually travels the roadway.

(c) Berms may have openings to the extent necessary for roadway drainage.

(d) Where elevated roadways are infrequently traveled and used only by service or maintenance vehicles, berms or guardrails are not required when all of the following are met: (1) Locked gates are installed at the entrance points to the roadway. (2) Signs are posted warning that the roadway is not bermed. (3) Delineators are installed along the perimeter of the elevated roadway so that, for both directions of travel, the reflective surfaces of at least three delineators along each elevated shoulder are always visible to the driver and spaced at intervals sufficient to indicate the edges and attitude of the roadway. (4) A maximum speed limit is posted and observed for the elevated unbermed portions of the roadway. Factors to consider when establishing the maximum speed limit shall include the width, slope and alignment of the road, the type of equipment using the road, the road material, and any hazardous conditions which may exist. (5) Road surface traction is not impaired by weather conditions, such as sleet and snow, unless corrective measures are taken to improve traction.

(e) This standard is not applicable to rail beds.

#### **Dumpsite restraints**

**209a26(5) / [30 CFR § 56.9301](#)**

Berms, bumper blocks, safety hooks, or similar impeding devices shall be provided at dumping locations where there is a hazard of overtravel or overturning.

#### **Construction of ramps and dumping facilities**

**209a26(6) / [30 CFR § 56.9303](#)**

Ramps and dumping facilities shall be designed and constructed of materials capable of supporting the loads to which they will be subjected. The ramps and dumping facilities shall provide width, clearance, and headroom to safely accommodate the mobile equipment using the facilities.

#### **Unstable ground**

**209a26(7) / [30 CFR § 56.9304](#)**

(a) Dumping locations shall be visually inspected prior to work commencing and as ground conditions warrant.

(b) Where there is evidence that the ground at a dumping location may fail to support the mobile equipment, loads shall be dumped a safe distance back from the edge of the unstable area of the bank.

**Truck spotters****209a26(8) / [30 CFR § 56.9305](#)**

- (a) If truck spotters are used, they shall be in the clear while trucks are backing into dumping position or dumping.
- (b) Spotters shall use signal lights to direct trucks where visibility is limited.
- (c) When a truck operator cannot clearly recognize the spotter's signals, the truck shall be stopped.

**Warning devices for restricted clearances****209a26(9) / [30 CFR § 56.9306](#)**

Where restricted clearance creates a hazard to persons on mobile equipment, warning devices shall be installed in advance of the restricted area and the restricted area shall be conspicuously marked.

**Working around drawholes****209a26(10) / [30 CFR § 56.9312](#)**

Unless platforms or safety lines are used, persons shall not position themselves over drawholes if there is danger that broken rock or material may be withdrawn or bridged.

**Roadway maintenance****209a26(11) / [30 CFR § 56.9313](#)**

Water, debris, or spilled material on roadways which creates hazards to the operation of mobile equipment shall be removed.

**Trimming stockpiles and muckpile faces****209a26(12) / [30 CFR § 56.9314](#)**

Stockpile and muckpile faces shall be trimmed to prevent hazards to persons.

**Dust control****209a26(13) / [30 CFR § 56.9315](#)**

Dust shall be controlled at muck piles, material transfer points, crushers, and on haulage roads where hazards to persons would be created as a result of impaired visibility.

**Notifying equipment operator****209a26(14) / [30 CFR § 56.9316](#)**

When an operator of self-propelled mobile equipment is present, persons shall notify the equipment operator before getting on or off that equipment.

**Suspended loads****209a26(15) / [30 CFR § 56.9317](#)**

Persons shall not work or pass under the buckets or booms of loaders in operation.

**Getting on or off moving equipment****209a26(16) / [30 CFR § 56.9318](#)**

Persons shall not get on or off moving mobile equipment. This provision does not apply to trainmen, brakemen, and car droppers who are required to get on or off slowly moving trains in the performance of their work duties.

**Subpart K – ELECTRICITY****Protection of power conductors from mobile equipment****209a27(1) / [30 CFR § 56.12005](#)**

Mobile equipment shall not run over power conductors, nor shall loads be dragged over power conductors, unless the conductors are properly bridged or protected.

**Work on electrically-powered equipment.****209a27(2) / [30 CFR § 56.12016](#)**

Electrically powered equipment shall be deenergized before mechanical work is done on such equipment. Power switches shall be locked out or other measures taken which shall prevent the equipment from being energized without the knowledge of the individuals working on it. Suitable warning notices shall be posted at the power switch and signed by the individuals who are to do the work. Such locks or preventive devices shall be removed only by the persons who installed them or by authorized personnel.

**Movement or operation of equip near high-voltage power lines****209a27(3) / [30 CFR § 56.12071](#)**

When equipment must be moved or operated near energized high-voltage powerlines (other than trolley lines) and the clearance is less than 10 feet, the lines shall be deenergized or other precautionary measures shall be taken.

## Subpart M – MACHINERY AND EQUIPMENT

### *Safety Devices and Maintenance Requirements*

#### **Safety defects, examination, correction and records**

**209a28(2) / [30 CFR § 56.14100](#)**

- (a) Self-propelled mobile equipment to be used during a shift shall be inspected by the equipment operator before being placed in operation on that shift.
- (b) Defects on any equipment, machinery, and tools that affect safety shall be corrected in a timely manner to prevent the creation of a hazard to persons.
- (c) When defects make continued operation hazardous to persons, the defective items including self-propelled mobile equipment shall be taken out of service and placed in a designated area posted for that purpose, or a tag or other effective method of marking the defective items shall be used to prohibit further use until the defects are corrected.
- (d) Defects on self-propelled mobile equipment affecting safety, which are not corrected immediately, shall be reported to and recorded by the mine operator. The records shall be kept at the mine or nearest mine office from the date the defects are recorded, until the defects are corrected. Such records shall be made available for inspection by an authorized representative of the Secretary.

#### **Operators' stations**

**209a28(3) / [30 CFR §56.14103](#)**

- (a) If windows are provided on operators' stations of self-propelled mobile equipment, the windows shall be made of safety glass or material with equivalent safety characteristics. The windows shall be maintained to provide visibility for safe operation.
- (b) If damaged windows obscure visibility necessary for safe operation, or create a hazard to the equipment operator, the windows shall be replaced or removed. Damaged windows shall be replaced if absence of a window would expose the equipment operator to hazardous environmental conditions which would affect the ability of the equipment operator to safely operate the equipment.
- (c) The operator's stations of self-propelled mobile equipment shall (1) Be free of materials that could create a hazard to persons by impairing the safe operation of the equipment; and (2) Not be modified, in a manner that obscures visibility necessary for safe operation.

#### **Procedures during repairs or maintenance**

**209a28(4) / [30 CFR § 56.14105](#)**

Repairs or maintenance of machinery or equipment shall be performed only after the power is off, and the machinery or equipment blocked against hazardous motion. Machinery or equipment motion or activation is permitted to the extent that adjustments or testing cannot be performed without motion or activation, provided that persons are effectively protected from hazardous motion.

#### **Falling Object Protection**

**209a28(5) / [30 CFR § 5614106](#)**

- (a) Fork-lift trucks, front-end loaders, and bulldozers shall be provided with falling object protective structures if used in an area where falling objects could create a hazard to the equipment operator.
- (b) The protective structure shall be capable of withstanding the falling object loads to which it would be subjected.

#### **Moving machine parts**

**209a28(6) / [30 CFR § 56.14107](#)**

- (a) Moving machine parts shall be guarded to protect persons from contacting gears, sprockets, chains, drive, head, tail, and takeup pulleys, flywheels, couplings, shafts, fan blades, and similar moving parts that can cause injury.
- (b) Guards shall not be required where the exposed moving parts are at least seven feet away from walking or working surfaces.

#### **Construction and maintenance of guards**

**209a28(7) / [30 CFR § 56.14112](#)**

- (a) Guards shall be constructed and maintained to-- (1) Withstand the vibration, shock, and wear to which they will be subjected during normal operation; and (2) Not create a hazard by their use.
- (b) Guards shall be securely in place while machinery is being operated, except when testing or making adjustments which cannot be performed without removal of the guard.

## Roll-over protective structures (ROPS) and seat belts

209a28(8) / [30 CFR § 56.14130](#)

(a) *Equipment included.* Roll-over protective structures (ROPS) and seat belts shall be installed on-- (1) Crawler tractors and crawler loaders; (2) Graders; (3) Wheel loaders and wheel tractors; (4) The tractor portion of semi-mounted scrapers, dumpers, water wagons, bottom-dump wagons, rear-dump wagons, and towed fifth wheel attachments; (5) Skid-steer loaders; and (6) Agricultural tractors.

(b) *ROPS construction.* ROPS shall meet the requirements of the following Society of Automotive Engineers (SAE) publications, as applicable, which are incorporated by reference: (1) SAE J1040, "Performance Criteria for Roll-Over Protective Structures (ROPS) for Construction, Earthmoving, Forestry, and Mining Machines," 1986; or (2) SAE J1194, "Roll-Over Protective Structures (ROPS) for Wheeled Agricultural Tractors", 1983.

(c) *ROPS labelling.* ROPS shall have a label permanently affixed to the structure identifying (1) The manufacturer's name and address; (2) The ROPS model number; and (3) The make and model number of the equipment for which the ROPS is designed.

(d) *ROPS installation.* ROPS shall be installed on the equipment in accordance with the recommendations of the ROPS manufacturer.

(e) *ROPS maintenance.* (1) ROPS shall be maintained in a condition that meets the performance requirements applicable to the equipment. If the ROPS is subjected to roll-over or abnormal structural loading, the equipment manufacturer or a registered professional engineer with knowledge and experience in ROPS design shall recertify that the ROPS meets the applicable performance requirements before it is returned to service. (2) Alterations or repairs on ROPS shall be performed only with approval from the ROPS manufacturer or under the instructions of a registered professional engineer with knowledge and experience in ROPS design. The manufacturer or engineer shall certify that the ROPS meets the applicable performance requirements.

(f) *Exemptions.* (1) This standard does not apply to-- (i) Self-propelled mobile equipment manufactured prior to July 1, 1969; (ii) Over-the-road type tractors that pull trailers or vans on highways; (iii) Equipment that is only operated by remote control; and (2) Self-propelled mobile equipment manufactured prior to October 24, 1988, that is equipped with ROPS and seat belts that meet the installation and performance requirements of 30 CFR 56.9088 (1986 edition) shall be considered in compliance with paragraphs (b) and (h) of this section.

(g) *Wearing seat belts.* Seat belts shall be worn by the equipment operator except that when operating graders from a standing position, the grader operator shall wear safety lines and a harness in place of a seat belt.

(h) *Seat belts construction.* Seat belts required under this section shall meet the requirement of SAE J386, "Operator Restraint System for Off-Road Work Machines" (1985, 1993, or 1997), or SAE J1194, "Roll-Over Protective Structures (ROPS) for Wheeled Agricultural Tractors" (1983, 1989, 1994, or 1999), as applicable, which are incorporated by reference.

(i) *Seat belt maintenance.* Seat belts shall be maintained in functional condition, and replaced when necessary to assure proper performance.

(j) *Publications.* The incorporation by reference of these publications is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of these publications may be examined at any Metal and Nonmetal Mine Safety and Health District Office; at MSHA's Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2349, Arlington, Virginia 22209-3939; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. Copies may be purchased from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, Pennsylvania 15096-0001.

## Seat belts for haulage trucks

209a28(9) / [30 CFR § 56.14131](#)

(a) Seat belts shall be provided and worn in haulage trucks.

(b) Seat belts shall be maintained in functional condition, and replaced when necessary to assure proper performance.

(c) Seat belts required under this section shall meet the requirements of SAE J386, "Operator Restraint System for Off-Road Work Machines" (1985, 1993, or 1997), which are incorporated by reference.

(d) The incorporation by reference of these publications is approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies of these publications may be examined at any Metal and Nonmetal Mine Safety and Health District Office; at MSHA's Office of Standards, Regulations, and Variances, 1100 Wilson Boulevard, Room 2349, Arlington, Virginia 22209-3939; or at the Office of the Federal Register, 800 North Capitol Street, NW., Suite

700, Washington, DC. Copies may be purchased from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, Pennsylvania 15096-0001. Manual

## **Horns and backup alarms**

**209a28(10) / [30 CFR § 56.14132](#)**

(a) Manually-operated horns or other audible warning devices provided on self-propelled mobile equipment as a safety feature shall be maintained in functional condition.

(b)(1) When the operator has an obstructed view to the rear, self-propelled mobile equipment shall have (i) An automatic reverse-activated signal alarm; (ii) A wheel-mounted bell alarm which sounds at least once for each three feet of reverse movement; (iii) A discriminating backup alarm that covers the area of obstructed view; or (iv) An observer to signal when it is safe to back up. (2) Alarms shall be audible above the surrounding noise level. (3) An automatic reverse-activated strobe light may be used at night in lieu of an audible reverse alarm.

(c) This standard does not apply to rail equipment.

## *Safety Practices and Operational Procedures*

### **Warnings prior to starting or moving equipment**

**209a28(11) / [30 CFR § 56.14200](#)**

Before starting crushers or moving self-propelled mobile equipment, equipment operators shall sound a warning that is audible above the surrounding noise level or use other effective means to warn all persons who could be exposed to a hazard from the equipment.

### **Machinery lubrication**

**209a28(12) / [30 CFR § 56.14204](#)**

Machinery or equipment shall not be lubricated manually while it is in motion where application of the lubricant may expose persons to injury.

### **Machinery, equipment and tools**

**209a28(13) / [30 CFR § 56.14205](#)**

Machinery, equipment, and tools shall not be used beyond the design capacity intended by the manufacturer where such use may create a hazard to persons.

### **Securing movable parts**

**209a28(14) / [30 CFR § 56.14206](#)**

(a) When moving mobile equipment between workplaces, booms, forks, buckets, beds, and similar movable parts of the equipment shall be positioned in the travel mode and, if required for safe travel, mechanically secured.

(b) When mobile equipment is unattended or not in use, dippers, buckets and scraper blades shall be lowered to the ground. Other movable parts, such as booms, shall be mechanically secured or positioned to prevent movement which would create a hazard to persons.

### **Parking procedures for unattended equipment**

**209a28(15) / [30 CFR § 56.14207](#)**

Mobile equipment shall not be left unattended unless the controls are placed in the park position and the parking brake, if provided, is set. When parked on a grade, the wheels or tracks of mobile equipment shall be either chocked or turned into a bank.

### **Movement of dippers, buckets, loading booms, or suspended loads** **209a28(16) / [30 CFR § 56.14210](#)**

(a) Dippers, buckets, loading booms, or suspended loads shall not be swung over the operators' stations of self-propelled mobile equipment until the equipment operator is out of the operator's station and in a safe location.

(b) This section does not apply when the equipment is specifically designed to protect the equipment operator from falling objects.

### **Blocking equipment in a raised position**

**209a28(17) / [30 CFR § 56.14211](#)**

(a) Persons shall not work on top of, under, or work from mobile equipment in a raised position until the equipment has been blocked or mechanically secured to prevent it from rolling or falling accidentally.

(b) Persons shall not work on top of, under, or work from a raised component of mobile equipment until the component has been blocked or mechanically secured to prevent accidental lowering. The equipment must also be blocked or secured to prevent rolling.

(c) A raised component must be secured to prevent accidental lowering when persons are working on or around mobile equipment and are exposed to the hazard of accidental lowering of the component.

(d) Under this section, a raised component of mobile equipment is considered to be blocked or mechanically secured if provided with a functional load-locking device or a device which prevents free and uncontrolled descent.

(e) Blocking or mechanical securing of the raised component is required during repair or maintenance of elevated mobile work platforms.

## Subpart N – PERSONAL PROTECTION

### **First aid materials** **209a29(1) / [30 CFR § 56.15001](#)**

Adequate first-aid materials, including stretchers and blankets, shall be provided at places convenient to all working areas. Water or neutralizing agents shall be available where corrosive chemicals or other harmful substances are stored, handled, or used.

### **Hard hats** **209a29(2) / [30 CFR § 56.15002](#)**

All persons shall wear suitable hard hats when in or around a mine or plant where falling objects may create a hazard.

### **Protective footwear** **209a29(3) / [30 CFR § 56.15003](#)**

All persons shall wear suitable protective footwear when in or around an area of a mine or plant where a hazard exists which could cause an injury to the feet.

### **Eye protection** **209a29(4) / [30 CFR § 56.15004](#)**

All persons shall wear safety glasses, goggles, or face shields or other suitable protective devices when in or around an area of a mine or plant where a hazard exists which could cause injury to unprotected eyes.

### **Safety belts and lines** **209a29(5) / [30 CFR § 56.15005](#)**

Safety belts and lines shall be worn when persons work where there is danger of falling; a second person shall tend the lifeline when bins, tanks, or other dangerous areas are entered.

### **Protective equip and clothing for hazards and irritants** **209a29(6) / [30 CFR § 56.15006](#)**

Special protective equipment and special protective clothing shall be provided, maintained in a sanitary and reliable condition and used whenever hazards of process or environment, chemical hazards, radiological hazards, or mechanical irritants are encountered in a manner capable of causing injury or impairment.

### **Protective equip or clothing for welding, cutting, or...** **209a29(7) / [30 CFR § 56.15007](#)**

Protective clothing or equipment and face shields, or goggles shall be worn when welding, cutting, or working with molten metal.

### **Life jackets, belts** **209a29(8) / [30 CFR § 56.15020](#)**

Life jackets or belts shall be worn where there is danger from falling into water.

## Subpart O – MATERIALS STORAGE AND HANDLING

### **Taglines, hitches, and slings** **209a30(1) / [30 CFR § 56.16007](#)**

(a) Taglines shall be attached to loads that may require steadying or guidance while suspended.

(b) Hitches and slings used to hoist materials shall be suitable for the particular material handled.

### **Suspended loads** **209a30(2) / [30 CFR § 56.16009](#)**

Persons shall stay clear of suspended loads.

## **Dropping materials from overhead**

**209a30(3) / [30 CFR § 56.16010](#)**

To protect personnel, material shall not be dropped from an overhead elevation until the drop area is first cleared of personnel and the area is then either guarded or a suitable warning is given.

## **Subpart P – ILLUMINATION**

### **Illumination**

**209a31 / [30 CFR § 56.17001](#)**

Illumination sufficient to provide safe working conditions shall be provided in and on all surface structures, paths, walkways, stairways, switch panels, loading and dumping sites, and work areas.

## **Subpart Q – SAFETY PROGRAMS**

### **Examination of workplaces**

**209a32(1) / [30 CFR § 56.18002](#)**

(a) A competent person designated by the operator shall examine each working place at least once each shift for conditions which may adversely affect safety or health. The operator shall promptly initiate appropriate action to correct such conditions.

(b) A record that such examinations were conducted shall be kept by the operator for a period of one year, and shall be made available for review by the Secretary or his authorized representative.

(c) In addition, conditions that may present an imminent danger which are noted by the person conducting the examination shall be brought to the immediate attention of the operator who shall withdraw all persons from the area affected (except persons referred to in section 104(c) of the Federal Mine Safety and Health Act of 1977) until the danger is abated.

### **Emergency communications system**

**209a32(2) / [30 CFR § 56.18013](#)**

A suitable communication system shall be provided at the mine to obtain assistance in the event of an emergency.

### **Working alone**

**209a32(3) / [30 CFR § 56.18020](#)**

No employee shall be assigned, or allowed, or be required to perform work alone in any area where hazardous conditions exist that would endanger his safety unless he can communicate with others, can be heard, or can be seen.

## **Subpart S – MISCELLANEOUS**

### **Housekeeping**

**209a.33(1) / [30 CFR § 56.20003](#)**

At all mining operations—

(a) Workplaces, passageways, storerooms, and service rooms shall be kept clean and orderly;

(b) The floor of every workplace shall be maintained in a clean and, so far as possible, dry condition. Where wet processes are used, drainage shall be maintained, and false floors, platforms, mats, or other dry standing places shall be provided where practicable; and

(c) Every floor, working place, and passageway shall be kept free from protruding nails, splinters, holes, or loose boards, as practicable.

### **Barricades and warning signs**

**209a.33(2) / [30 CFR § 56.20011](#)**

Areas where health or safety hazards exist that are not immediately obvious to employees shall be barricaded, or warning signs shall be posted at all approaches. Warning signs shall be readily visible, legible, and display the nature of the hazard and any protective action required.

### **Accident Reporting**

**209a42 / No 30 CFR**