

Checklist: Overview of Regulations either Frequently Inspected or Most often Cited

If an MSHA inspector comes to your property for an inspection, the following is a list of regulations we think will be looked at. Remember, all mine operators are required to be in compliance with ALL regulations that apply to their mine. However, the following is a good starting checklist for you. You can use this list as a guide for self-inspections of your property.

If, after inspecting your property, you can honestly say that you are in compliance with these regulations, then you are well on your way to reducing citations AND creating a safe, productive operation.

NOTE: The narrative following the regulation number in this list is an abridged version of the full regulation. It is intended to give you a general idea of what that regulation states. For the full regulation and MSHA policy, see Title 30, CFR and MSHA's Program Policy Manual.

Below is a list of Regulation Topic Areas.

- Required Safety Policies
- Records and Examinations
- Fire Prevention
- Electrical
- Loading, Hauling and Dumping
- Machinery and Equipment
- Personal Protection and PPE

REQUIRED SAFETY POLICIES

56.18009 - Emergencies person in charge of mine - Competent person designated by the mine operator shall be in attendance to take charge in case of an emergency

41.11 to 41.30 - Identity (Legal) of operator - MSHA must be notified in writing of legal identity of operator or any changes within 30 days using form 2000-7 "legal identity report".

40.1 to 40.5 - Representative of miners- How a person becomes a miner's representative and requirements of position.

48 (All) - Company Safety policies

56.9100 - Traffic control rules governing speed, right-of-way, direction of movement, and the use of headlights to assure appropriate visibility are required; also properly placed signs or signals that warn of hazardous conditions.

RECORDS & EXAMINATIONS

50.20 - Accident, Injury and Illness Report - MSHA Report Form 7000-1 - Requires preparation and submission.

56.12004 - Electrical conductor size - Electrical conductors must be of sufficient size and load carrying capacity and also protected from mechanical damage.

56.12028 - Electrical continuity and resistance of grounding systems - record of testing and results of most recent test are required. Test must be done immediately after installation, repair, and modification;and annually.

56.18010 - Emergency first aid - Requires individual currently-trained in selected topics and capable of providing first aid to be available on all shifts.

56.18012 - Emergency telephone numbers - Requires posting at appropriate telephones.

56.18013 - Emergency communication system required at the mine to obtain assistance in the event of an emergency.

56.18014 - Emergency medical assistance and transportation - Requires that arrangements be made in advance for obtaining emergency medical assistance and transportation for injured persons.

56.4201 - Hydrostatic testing - Certifications of hydrostatic testing shall be retained until the fire extinguisher is retested or permanently removed from service. Other certifications shall be retained for one year.

45.4 - Independent contractor list - Requires independent contractor to provide the production-operator certain written information including identification, description of work, MSHA ID number, address of record etc. The production operator must have this information available at the mine for MSHA.

56.14100 (a) - Inspection of self-propelled mobile equipment for defects - records of inspections and certifications. - equipment must be examined for defects by the equipment operator each shift before operating.

56.18002(a) - Inspection of working places once each shift by competent person. C requires immediate withdrawal of persons until danger is abated.

56.18002(b) - Inspection of working places - Records of examination - Requires record of examination.
Explosives permit.

56.16004 - MSDS sheets - Hazardous materials shall be stored in containers of a type approved for such use by recognized agencies; such containers shall be labeled appropriately.

56.20012 - Toxic materials used in conjunction with or discarded from mining or milling of a product shall be plainly marked or labeled so as to positively identify the nature of the hazard and the protective action required.

56.1000 - Notice of commencement or closing - MSHA must be notified of either commencement or closing of mine.

56.13015(b) - Pressure vessels - records of inspections of compressed air receivers and other unfired pressure vessels - requires that records of inspections made by inspectors holding a valid National Board Commission be retained by the mine operator in accordance with the requirements of the National Board Inspection Code (progressive record - no limit on retention time) and be made available to MSHA. The recordkeeping requirement may be satisfied by an operator's written statement that the inspections have been made in accordance with the incorporated code. MSHA will accept such a certifying statement annually, without regard to format, if it is made available at the time of inspection.

FIRE PREVENTION

56.4201 (a) (1,2,3) - Fire extinguisher inspection - records required - (monthly check for full charge and operability) and annual maintenance checks), also must meet hydrostatic testing schedule in standard.

56.4201(a)(4) - Other fire fighting system quarterly inspection and annual use tests.

56.4201(a)(5) - Fire suppression system annual inspection based on the manufacturer's specifications to determine that system remains functional. Surface fire suppression systems are exempt from these inspection requirements if the systems are used solely for the protection of property and no persons would be affected by a fire.

56.4201(b) - Records of inspections and certifications of hydrostatic testing are required..

56.4200 (b) (1) - Fire fighting equipment - A mine must have on-site equipment for fighting fires that could endanger persons including:(1)

Equipment for fires in their early stages; (2) Equipment for fires beyond their early stages, or prior arrangements with a local fire department to fight such fires. This onsite equipment must be of the type, size, and quantity that can extinguish fires of any class which could occur as a result of the hazards present and strategically located, readily accessible, plainly marked, and maintained in fire-ready condition.

56.4501 - Fuel lines must be valved for shutoff in case of fire - (doesn't pertain to self-propelled equipment).

56.4402 - Fuel safety cans - Requires small quantities of flammable liquids to be in properly-labeled safety cans.

56.6101 - Storage of explosives - explosives must be stored 25 feet from combustibles including grass except live trees 10 feet or higher. Other combustibles must not be stored or allowed to accumulate within 50 feet. Drainage of stored combustible liquids must be away from explosive material storage facility.

56.4601 - Storage of oxygen cylinders - Oxygen cannot be stored in rooms or areas used or designated for storage of flammable or combustible liquids including grease.

56.4104 - Storage of waste materials - Waste materials, including liquids, must not accumulate in quantities that could create a fire hazard. Waste or rags containing flammable or combustible liquids that could create a fire hazard must be placed in covered metal containers or equivalent.

ELECTRICAL

56.12032 - Cover plates - Inspection and cover plates on electrical equipment and junction boxes must be kept on except during testing or repairs.

56.12030 - Dangerous condition, correction of - When a potentially dangerous condition is found it must be corrected before equipment or wiring is energized.

56.12001 - Fuses and circuit breakers - Circuits must be protected by fuses or circuit breakers of the correct type and capacity.

56.12034 - Guarding lights - Portable extension lights, and other lights that by their location present a shock or burn hazard must be guarded.

56.12025 - Grounding - All metal enclosing or encasing electrical circuits must be grounded or provided with equivalent protection. This requirement does not apply to battery-operated equipment.

56.12008 - Insulation on wires and fittings - Wires and cables must be insulated where they enter electrical compartments. Cables must enter metal frames through proper fittings. The holes must be bushed with insulated bushings

56.12018 - Labeling power switches - Principal power switches must be labeled to show which units they control, unless obvious by location.

56.12035 - Lamp sockets construction - Lamp sockets must be of a weatherproof type where they are exposed to weather or wet conditions that may interfere with illumination or create a shock hazard.

56.12016 and 56.12017 - Lockout/tagout - Electrically powered equipment must be deenergized before mechanical work. Power switches must be locked out or other measures taken. Suitable warning notices must be posted at the power switch and signed by the individuals doing the work. Locks are to be removed only by persons who installed them or authorized personnel. Power circuits shall be deenergized before work is done on such circuits unless hot-line tools are used. Suitable warning signs shall be posted by the individuals who are to do the work. Switches shall be locked out or other measures taken which shall prevent the power circuits from being energized without the knowledge of the individuals working on them. Such locks, signs, or preventative devices shall be removed only by the person who installed them or by authorized personnel.

56.12013 - Splices - permanent - Permanent splices and repairs made in power cables, including the ground conductor where provided, shall be:(a) Mechanically strong with electrical conductivity as near as possible to that of the original;(b) Insulated to a degree at least equal to that of the original, and sealed to exclude moisture; and (c) Provided with damage protection as near as possible to that of the original, including good bonding to the outer jacket.

56.12021 - Signs - danger - Suitable danger signs must be posted at all major electrical installations.

56.12028 - Testing for continuity and resistance of grounding systems immediately after installation, repair, and modification; and annually. Requires available record of the resistance measured during the most recent tests.

56.12067 - Transformer - enclosures - Transformers must be totally

enclosed, or placed at least 8 feet above the ground, or installed in a transformer house, or surrounded by a substantial fence at least 6 feet high and at least 3 feet from any energized parts, casings, or wiring.

56.12068 - Transformer enclosures must be kept locked against unauthorized entry.

LOADING, HAULING AND DUMPING

56.14132 (a) (b) - Backup alarm requirements - 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.

56.9301 - Berms - dumping locations - Berms, bumper blocks, safety hooks, or similar impeding devices must be provided at dumping locations where there is a hazard of overtravel or overturning.

56.9300 - Berms/guardrails - roadways - Berms or guardrails of at least mid-axle height (of largest vehicle) must be provided and maintained on banks of roadways with drop-off of sufficient grade or depth to cause vehicle to overturn or endanger persons in equipment. Berms may have openings for roadway drainage. Berms are not required on infrequently traveled roads used only by service or maintenance vehicles, when all of the following exist: (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 must 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.

56.14101 (a) (3) - Brakes - minimum requirements for self-propelled mobile equipment - Service brake system must be capable of stopping and holding the equipment with its typical load on the maximum grade it travels. Not applicable to equipment not originally equipped with brakes unless the manner in which the equipment is being operated requires the use of brakes for safe operation. Not applicable to rail equipment.(2) If equipped, parking brakes must be capable of holding the equipment with its typical load on the maximum grade it travels.(3) All braking systems must be maintained in functional condition.

56.9315 - Dust control - Dust must 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.

56.3131 - Loose or unconsolidated material slopes - In places where persons work or travel loose or unconsolidated material must 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 must be corrected.

56.9201 - Loading, transporting, and unloading of equipment and supplies must not create a hazard to persons from falling or shifting equipment or supplies.

56.14207 - Parking requirements for mobile equipment - 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 or rib.

56.9313 - Road cleanup - Water, debris, or spilled material on roadways which creates hazards to the operation of mobile equipment must be removed.

56.14130 (a) - Seat Belts and ROPs requirement and construction- Tells where and how roll-over protective structures (ROPS) and seat belts must be installed, how constructed, how maintained, limitations in altering, exceptions (manufactured before 1969) etc. 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. Seat belts shall meet the requirements of SAE J386, "Operator Restraint Systems for Off-Road Work Machines", 1985; or SAE J1194, "Roll-Over Protective structures (ROPS)

construction - as under "Wheeled Agricultural Tractors", 1983, as applicable, which are incorporated by reference.

56.9100 - Traffic control rules - Requires traffic control rules governing speed, right-of-way, direction of movement, and the use of headlights to assure appropriate visibility; also properly placed signs or signals that warn of hazardous conditions.

56.14103 (a) - Window construction on mobile equipment - Mobile equipment windows must be made of safety glass or material with equivalent safety characteristics. The windows must be maintained to provide visibility for safe operation.

MACHINERY AND EQUIPMENT

56.14201(b) - Conveyor startup warning - When entire length of the conveyor is not visible from the starting switch, a visible or audible startup warning is required.

56.14112 (a) (b) - Guard construction - Guards must 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. Guards must be securely in place while machinery is being operated, except when testing or making adjustments which cannot be performed without removal of the guard.

56.14109 - Guarding conveyors next to the travelways - Unguarded conveyors next to travelways must be equipped with-- (a) Emergency stop devices which are located so that a person falling on or against the conveyor can readily deactivate the conveyor drive motor; or (b) Railings which--(1) Are positioned to prevent persons from falling on or against the conveyor; (2) Will be able to withstand the vibration, shock, and wear to which they will be subjected during normal operation; and (3) Are constructed and maintained so that they will not create a hazard.

56.14110 - Guarding - flying or falling materials - In areas where flying or falling materials generated from the operation of screens, crushers, or conveyors present a hazard, guards, shields, or other devices that provide protection against such flying or falling materials shall be provided to protect persons.

56.14107 (a) - Guarding of moving machine parts - Moving machine parts must 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.

Guards aren't required where the exposed moving parts are at least seven feet away from walking or working surfaces.

56.14112 - Guards must be securely in place when machinery is operated.

56.14108 - Guarding of overhead drive belts - Overhead drive belts must be guarded to contain the whipping action of a broken belt if that action could be hazardous to persons.

56.13021 - High pressure hose safety chains - Safety chains or other suitable locking devices shall be used on high pressure hose lines of ? inch inside diameter or larger.

56.14200 - Startup alarm requirements - 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.

PERSONAL PROTECTION AND PPE

56.11001 - Access - safe - Safe means of access shall be provided and maintained to all working places.

56.16005 - Compressed and liquid gas cylinders shall be secured in a safe manner.

56.16006 - Valves on compressed gas cylinders shall be protected by covers when being transported or stored, and by a safe location when the cylinders are in use.

56.5001(a)(5) - Dust overexposure - (a) Except as provided in paragraph (b) of this section, the exposure to airborne contaminants shall not exceed, on the basis of a time weighted average, the threshold limit values adopted by the American Conference of Governmental Industrial Hygienists, as set forth and explained in the 1973 edition of the Conference's publication.

56.15001 - Emergency supplies - 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.

56.15005 - Fall protection - 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.

56.15003 - Footware - 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.

56.15004 - Glasses - 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.

56.15002 - Hard hats - All persons shall wear suitable hard hats when in or around a mine or plant where falling objects may create a hazard.

56.20003 - Housekeeping - 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.

56.5050 - Noise - Exposure limits - (a) No employee shall be permitted an exposure to noise in excess of that specified in the table in standard. Noise level measurements shall be made using a sound level meter meeting specifications for type 2 meters contained in American National Standards Institute (ANSI) Standard S1.4-1971, "General Purpose Sound Level Meters," approved April 27, 1971 - Some values are 90 dBA for 8 hours, 92 dBA for 6 hours, 95 dBA for 4 hours, 97 dBA for 3 hours, 100 dBA for 2 hours, 102 dBA for 1.5 hours, 105 dBA for 1 hour, 100 dBA for ? hour and 115 dBA for ? hour. b) When employees' exposure exceeds that listed, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce exposure to within permissible levels, personal protection equipment shall be provided and used to reduce sound levels to within the levels of the table. Hearing protection is recommended at levels above 85 dBA. The miner is overexposed when noise dosimeter measurements equal or exceed 132 percent, or sound level meter readings exceed 117dBA. In determining a miner's exposure, MSHA does not consider the attenuation provided by any hearing protection worn. One citation is issued for each miner found overexposed. However, a citation is not issued if the miner is wearing adequate hearing protection and noise controls are not feasible.

56.11012 - Openings around travelways - Openings above, below, or near travelways through which persons or materials may fall must be protected by railings, barriers, or covers. Where it is impractical to install such protective devices, adequate warning signals must be installed.

56.5005 - Respirator program/fit-testing if over-exposure is found during MSHA health sampling. Not enforced/required by MSHA if no overexposure was found.

56.11027 - Scaffolds and working platforms shall be safe to work on and maintained in a safe condition.

56.14130(i) - Seat belts maintenance - Seat belts shall be maintained in a functional condition, and replaced when necessary to assure proper performance.

56.11016 - Snow and ice cleanup - Regularly used walkways and travelways shall be sanded, salted, or cleared of snow and ice as soon as practicable.

56.16004 - Storage of hazardous materials - Hazardous materials shall be stored in containers of a type approved for such use by recognized agencies; such containers shall be labeled appropriately.

56.16001 - Storage of supplies - Supplies shall not be stacked or stored in a manner which creates tripping or fall-of-material hazards.

56.9317 - Suspended loads - Persons must stay clear of suspended loads.

56.11002 - Toeboards and handrails - Crossovers, elevated walkways, elevated ramps, and stairways shall be of substantial construction provided with handrails, and maintained in good condition. Where necessary, toeboards shall be provided.

56.20008 - Toilet facilities shall be provided at locations that are compatible with the mine operations and that are readily accessible to mine personnel. (b) The facilities shall be kept clean and sanitary. Separate toilet facilities shall be provided for each sex except where toilet rooms will be occupied by no more than one person at a time and can be locked from the inside.