FINAL RULEMAKING
BOARD OF COAL MINE SAFETY
25 PA. CODE CH. 208
Standards for Surface Facilities

The Board of Coal Mine Safety (Board) amends Chapter 208 (relating to underground coal mine safety) to read as set forth in Annex A. The final rulemaking implements existing Federal regulations, thereby making them independently enforceable by the Commonwealth.

Sections 106 and 106.1 of the Bituminous Coal Mine Safety Act (BCMSA) (52 P. S. §§ 690-106 and 690-106.1) authorize the adoption of regulations for its implementation including additional safety standards. The BCMSA further authorizes the Board to promulgate necessary or appropriate regulations to implement the requirements of the BCMSA and to protect the health, safety and welfare of miners and other individuals in and about mines.

This notice is given under Board order at its meeting of _____, 2015.

A. *Effective Date*

This final rulemaking will be effective upon final-form publication in the *Pennsylvania Bulletin*.

B. *Contact Persons*

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C. *Statutory Authority*

The final rulemaking is authorized under sections 106 and 106.1 of the BCMSA, which grants the Board the authority to adopt regulations to implement the BCMSA including additional safety standards. The Board is further authorized to promulgate regulations that are necessary or appropriate to protect the health, safety and welfare of miners and other individuals in and about mines.

D. *Background and Purpose*

On July 7, 2008, the General Assembly enacted the BCMSA, which was the first significant update of the Commonwealth's underground bituminous coal mine safety laws since 1961. See section 103(a) of the BCMSA (52 P. S. § 690-103(a)). The BCMSA provides broad authority to promulgate regulations that are necessary or appropriate to implement the BCMSA and to protect the health, safety and welfare of miners and other individuals in and about mines. See

section 106.1(a) of the BCMSA. Final regulations consistent with Federal standards may also be promulgated under section 106.1(c) of the BCMSA. Under section 106 of the BCMSA, the Board consists of three members representing mine workers, three members representing underground bituminous coal mine operators and the Secretary of the Department of Environmental Protection (Department) who serves as the Board's chairperson.

This final rulemaking implements existing Federal regulations that broadly relate to the surface work areas of underground coal mines and govern surface installations, thermal dryers, safeguards for mechanical equipment, electrical equipment, trailing cables, grounding, surface high-voltage distribution, low-voltage and medium-voltage alternating currents, ground control, fire protection, maps, personnel hoisting, wire ropes, trolley wires and trolley feeder wires, and slope and shaft sinking. As a result, the existing Federal regulations will become independently enforceable in this Commonwealth.

At the outset, the final rulemaking implements the Federal regulations regarding qualified or certified persons. The Federal regulations require certain types of work and certain tests—electrical work and tests for methane, for example—to be conducted by qualified or certified persons. Requiring a person to be qualified or certified ensures that the examinations and tests they conduct and the duties they carry out will be done in a professional manner, thus enhancing the safety of persons in and around mine sites.

Another component of the final rulemaking implements the Federal regulations governing surface installations. These rules ensure that underground bituminous coal mine structures, enclosures and other facilities located on the surface are maintained in good repair to prevent accidents and injuries. Accordingly, the rules mandate proper illumination, safe storage of materials, and suitable slings and hitches for hoisting materials, among other requirements.

Additionally, the final rulemaking implements the Federal mine safety regulations for thermal dryers. Thermal dryers are an integral part of coal processing and are used to dry coal at high temperatures. The Federal regulations governing thermal dryers are intended to ensure that thermal dryers are properly used and located on the site and mandate certain safeguards to minimize the risks associated with the use of thermal dryers.

This final rulemaking also implements the Federal regulations mandating safeguards for mechanical equipment. These Federal regulations ensure that various machines and other types of mechanical equipment are maintained, located, operated and handled in a safe and proper manner. Similarly, this rulemaking adopts the Federal requirements regarding electrical equipment at the surface operations of underground bituminous coal mines. These requirements ensure that electrical equipment is adequately maintained, insulated and used.

Another component of the Federal regulations implemented by this final rulemaking regards trailing cables. Generally, trailing cables are the cords that connect portable or mobile equipment and devices to power sources. Ensuring that trailing cables on mine sites are properly handled, spliced and protected enhances safety at a mine site.

This final rulemaking also implements the Federal regulations regarding the grounding of electricity-conducting materials. Included in these Federal regulations are requirements for grounding wires, equipment receiving power from underground alternating power current systems and enclosures of electric equipment.

In addition, this final rulemaking implements the Federal regulations governing surface high-voltage distribution. These Federal regulations promote safety at a mine site by ensuring high-voltage power supplies and transmission are properly maintained, connected, grounded and tested. This final rulemaking likewise implements the Federal requirements relative to low-voltage and medium-voltage alternating current at the surface areas of underground bituminous coal mine sites which ensure the proper usage, maintenance, grounding, connecting and testing of low-voltage and medium-voltage currents.

The Federal ground control mine safety regulations are also implemented by this final rulemaking. These Federal requirements require operators to establish certain plans and procedures and take certain precautions when conducting activities relative to stripping, box cuts, highwalls and drilling.

The final rulemaking adopts Federal regulations relative to fire protection at the surface operations of underground bituminous coal mine sites. These requirements ensure that proper plans, warning signs and firefighting equipment are maintained on the mine site. They also ensure that flammable materials and fire-prone units like battery-charging stations are properly maintained.

The Federal requirements relative to personnel hoisting and wire ropes are also included in this final rulemaking. These requirements are intended to ensure that workers and cargo at mine sites may be safely elevated or lowered by structurally sound hoisting equipment. The wire-rope components of this equipment must be examined and measured and must meet minimum strength requirements.

There are loading and haulage requirements in the Federal regulations that are adopted by this final rulemaking. These Federal regulations ensure that loading and haulage equipment will be properly installed, inspected, maintained and operated.

In addition, this final rulemaking adopts some miscellaneous safety provisions including requirements for workers to have access to adequate means of communication and first aid equipment, and wear protective clothing. The final rulemaking adopts the Federal regulations governing mine maps.

This final rulemaking adopts Federal requirements regulating trolley wires and trolley feeder wires. These requirements ensure that trolley wires and trolley feeder wires are maintained in a way to reduce the risk of overcurrent.

This final rulemaking implements Federal mine safety regulations relative to slope and shaft sinking. These Federal regulations ensure that the operations associated with slopes and shafts are conducted in a safe manner.

Also included in this final rulemaking are definitions for "barricaded," "berm," "certified or registered," "flash point," "qualified person," "roll protection," "safety can" and "trailing cable." These definitions improve the clarity of the regulations and facilitate compliance with its requirements.

Adopting these regulations ensures that surface operations at underground bituminous coal mine sites are safely conducted and maintained. Although underground bituminous coal mine operators are already required to comply with these Federal regulations, implementing them in Chapter 208 provides the Department with the independent authority to enforce the Federal requirements. This results in improved efficiency and enhanced autonomy for the Commonwealth.

E. *Summary of Comments and Responses to the Proposed Rulemaking*

The Board did not receive any comments from the public regarding the proposed underground coal mine safety regulations during the public comment period. The Board received two comments from the Independent Regulatory Review Commission (IRRC).

IRRC recommended that the Board clarify its intent to require that training programs be approved by MSHA in addition to the existing Federal provision. This comment applies similarly to Sections 208.391 (relating to slopes and shafts; approval of plans) and 208.406 (relating to explosives and blasting; general).

The Board removed the proposed exception to Sections 208.108 and instead incorporated in full the Federal provision at 30 CFR 77.107 to clarify that the final form regulation is consistent with the Federal provision. The final-form rulemaking will require operators to seek approval of training programs from the Secretary of Labor "or his delegate." Regarding Section 208.391, operators currently are required to submit plans related to slope and shaft safety for the Department's approval; the Department accepts for approval plans submitted to MSHA pursuant to 30 CFR 77.1900. The final form regulation clarifies that although Section 208.391 incorporates the Federal provision, the Department retains independent approval authority over such plans.

Regarding Section 208.406, operators currently are required to comply with 25 Pa. Code Chapters 210 and 211 (relating to blasters' licenses; and storage, handling and use of explosives). The final form regulation clarifies that although Section 208.406 incorporates the Federal provision, operators must still comply with the applicable Pennsylvania regulations regarding explosives and blasting.

IRRC additionally commented that the proposed rules have a provision that requires an operator to submit to the Department a copy of any "application, report, plan or other material submitted to MSHA pursuant to a regulation" either where submission is required by the Pennsylvania regulations or at the request of MSHA. While the proposed regulation appears to be limited to those items already submitted to MSHA, IRRC suggested that the regulation may

be unnecessary as the BCMSA contains the provisions of what must be provided to the Department and to miner representatives.

The Board removed the proposed exception to Sections 208.364, and instead incorporates in full the Federal provision at 30 CFR 77.1604 to clarify that the final form regulation is consistent with the Federal provision.

F. *Summary of the Final-Form Rulemaking Including Changes from Proposed to Final-Form*

§ 208.1. Definitions

The rulemaking adds the following definitions of "barricaded," "berm," "certified or registered," "flash point," "qualified person," "roll protection," "safety can" and "trailing cable" to § 208.1 (relating to definitions).

Qualified and certified persons

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing qualified and certified persons.

§ 208.101 (relating to certified person) incorporates by reference 30 CFR 77.100 (relating to certified person). Certified persons are authorized to conduct certain tests and examinations at the surface areas of underground bituminous coal mining sites.

§ 208.102 (relating to tests for methane and for oxygen deficiency; qualified person) incorporates by reference 30 CFR 77.101 (relating to tests for methane and for oxygen deficiency; qualified person). This provision requires tests for methane and oxygen deficiency to be made by qualified persons.

§ 208.103 (relating to tests for methane; oxygen deficiency; qualified person, additional requirement) incorporates by reference 30 CFR 77.102 (relating to tests for methane; oxygen deficiency; qualified person, additional requirement). This provision requires the qualified person conducting methane and oxygen deficiency tests to possess a current card issued by the Mine Safety and Health Administration (MSHA) indicating that the person is in fact qualified to conduct this testing.

§ 208.104 (relating to electrical work; qualified person) incorporates by reference 30 CFR 77.103 (relating to electrical work; qualified person). This provision describes qualification procedures to become a qualified person to perform electrical work.

§ 208.105 (relating to repair of energized surface high-voltage lines; qualified person) incorporates by reference 30 CFR 77.104 (relating to repair of energized surface high-voltage lines; qualified person). This provision describes the qualification requirements for persons to repair energized surface high-voltage lines.

§ 208.106 (relating to qualified hoistman; slope or shaft sinking operation; qualifications) incorporates by reference 30 CFR 77.105 (relating to qualified hoistman; slope or shaft sinking operation; qualifications). This provision describes when a hoistman is qualified to operate a hoist at a slope or shaft operation.

§ 208.107 (relating to records of certified and qualified persons) incorporates by reference 30 CFR 77.106 (relating to records of certified and qualified persons). This provision requires an operator to maintain records of certified and qualified persons.

§ 208.108 (relating to training programs) incorporates by reference 30 CFR 77.107 (relating to training programs). This provision requires operators to provide a program of training and retraining certified and qualified persons. The Board removed "the exception that MSHA will approve the training program" from the final-form regulation in response to IRRC's comment suggesting the Board clarify that the regulation is consistent with the Federal provision and not an additional requirement.

Surface installations

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing surface installations.

§ 208.111 (relating to surface installations; general) incorporates by reference 30 CFR 77.200 (relating to surface installations; general). This provision requires all mine structures, enclosures or other facilities to be maintained in good repair to prevent accidents and injuries.

§ 208.112 (relating to methane content in surface installations) incorporates by reference 30 CFR 77.201 (relating to methane content in surface installations). This provision mandates that the methane content in the air of any structure, enclosure or other facility be less than 1% of the volume of air.

§ 208.113 (relating to tests for methane; qualified person; use of approved device) incorporates by reference 30 CFR 77.201-1 (relating to tests for methane; qualified person; use of approved device). This provision requires tests for methane in structures, enclosures or other facilities be conducted by a qualified person with an approved device at least once during each operating shift and immediately prior to any repair work where a welding torch or open flame is used or a spark may be produced.

§ 208.114 (relating to methane accumulations; change in ventilation) incorporates by reference 30 CFR 77.201-2 (relating to methane accumulations; change in ventilation). This provision provides for a change in the ventilation of any structure, enclosure or other facility when the air in a structure, enclosure or other facility contains more than 1% methane.

§ 208.115 (relating to dust accumulations in surface installations) incorporates by reference 30 CFR 77.202 (relating to dust accumulations in surface installations). This provision prohibits the dangerous accumulation of coal dust in the air of, in or on the surfaces of structures, enclosures or other facilities.

§ 208.116 (relating to use of material or equipment overhead; safeguards) incorporates by reference 30 CFR 77.203 (relating to use of material or equipment overhead; safeguards). This provision mandates the adequate protection of persons working or passing below areas where overhead work is being done or repairs are being made.

§ 208.117 (relating to openings in surface installations; safeguards) incorporates by reference 30 CFR 77.204 (relating to openings in surface installations; safeguards). This provision provides that openings in surface installations through which people or material may fall must be protected by railings, barriers or similar protective coverings or devices.

§ 208.118 (relating to travelways at surface installations) incorporates by reference 30 CFR 77.205 (relating to travelways at surface installations). This provision requires travelways to be maintained in a condition as to minimize the risk of slips, falls and other accidents.

§ 208.119 (relating to ladders; construction; installation and maintenance) incorporates by reference 30 CFR 77.206 (relating to ladders; construction; installation and maintenance). This provision provides for the safe use and maintenance of ladders.

§ 208.120 (relating to illumination) incorporates by reference 30 CFR 77.207 (relating to illumination). This provision requires safe illumination of surface structures, paths, walkways, stairways, switch panels, loading and dumping sites, and working areas.

§ 208.121 (relating to storage of materials) incorporates by reference 30 CFR 77.208 (relating to storage of materials). This provision requires materials to be stored in a way so as to minimize unsafe conditions.

§ 208.122 (relating to surge and storage piles) incorporates by reference 30 CFR 77.209 (relating to surge and storage piles). This provision prohibits a person from walking or standing immediately above a reclamation area or another area at or near a surge or storage pile where the reclamation operation may expose the person to a hazard.

§ 208.123 (relating to hoisting of materials) incorporates by reference 30 CFR 77.210 (relating to hoisting of materials). This provision mandates that hitches and slings used for hoisting be suitable for handling the type of materials being hoisted and requires workers to stay clear of hoisted loads.

§ 208.124 (relating to draw-off tunnels; stockpiling and reclaiming operations; general) incorporates by reference 30 CFR 77.211 (relating to draw-off tunnels; stockpiling and reclaiming operations; general). This provision requires tunnels located below stockpiles, surge piles and coal storage silos to be ventilated so that concentrations of methane do not exceed 1%. The provision also requires the concentration of methane to be less than 1% before electric equipment is energized, operated, or repaired.

§ 208.125 (relating to continuous methane monitoring device; installation and operation; automatic deenergization of electric equipment) incorporates by reference 30 CFR 77.211-1 (relating to continuous methane monitoring device; installation and operation; automatic

deenergization of electric equipment). This provision provides that continuous methane monitoring devices must be set to de-energize electric equipment automatically when a monitor is not operating properly and give a warning signal to alert of a certain concentration of methane not above 1%.

§ 208.126 (relating to draw-off tunnel ventilation fans; installation) incorporates by reference 30 CFR 77.212 (relating to draw-off tunnel ventilation fans; installation). This provision dictates installation requirements for draw-off tunnel ventilation fans.

§ 208.127 (relating to draw-off tunnel escapeways) incorporates by reference 30 CFR 77.213 (relating to draw-off tunnel escapeways). This provision provides that an escapeway shall be installed at the closed end of the tunnel to a safe location on the surface.

Thermal Dryers

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing thermal dryers.

§ 208.131 (relating to thermal dryers; general) incorporates by reference 30 CFR 77.300 (relating to thermal dryers; general). This provision provides that the operation and maintenance of thermal dryers shall comply with 30 CFR 77.301—77.306.

§ 208.132 (relating to dryer heating units; operation) incorporates by reference 30 CFR 77.301 (relating to dryer heating units; operation). This provision dictates the operation of dryer heating units used to dry coal at high temperatures.

§ 208.133 (relating to bypass stacks) incorporates by reference 30 CFR 77.302 (relating to bypass stacks). This provision requires thermal dryer systems to include a bypass stack, relief stack or individual discharge stack provided with automatic venting to permit gases from the dryer to bypass the heating chamber and vent to the outside atmosphere.

§ 208.134 (relating to hot gas inlet chamber dropout doors) incorporates by reference 30 CFR 77.303 (relating to hot gas inlet chamber dropout doors). This provision requires thermal dryer systems with hot gas inlet chambers to be equipped with dropout doors at the bottom of the inlet chamber to permit coal, fly ash or other heated material to fall from the chamber.

§ 208.135 (relating to explosion release vents) incorporates by reference 30 CFR 77.304 (relating to explosion release vents). This provision provides that drying chambers, dry-dust collectors and ductwork between collectors and discharge stacks shall be protected by explosion release vents which open directly to the outside atmosphere.

§ 208.136 (relating to access to drying chambers, hot gas inlet chambers and duct-work; installation and maintenance) incorporates by reference 30 CFR 77.305 (relating to access to drying chambers, hot gas inlet chambers and ductwork; installation and maintenance). This provision requires drying chambers, hot gas inlet chambers and all ductwork in which coal dust may accumulate to be equipped with tight sealing access doors.

§ 208.137 (relating to fire protection) incorporates by reference 30 CFR 77.306 (relating to fire protection). This provision allows an authorized representative of the regulator to require certain fire protection measures like water sprays and fog nozzles.

§ 208.138 (relating to thermal dryers; location and installation; general) incorporates by reference 30 CFR 77.307 (relating to thermal dryers; location and installation; general). This provision provides setback requirements for thermal dryers from mine openings and installation requirements regarding enclosing thermal dryers.

§ 208.139 (relating to structures housing other facilities; use of partitions) incorporates by reference 30 CFR 77.308 (relating to structures housing other facilities; use of partitions). This provision requires that thermal dryers installed in structures also housing tipples, cleaning plants or other operating facility be separated from other working areas by a substantial partition.

§ 208.140 (relating to visual check of system equipment) incorporates by reference 30 CFR 77.309 (relating to visual check of system equipment). This provision requires frequent visual checks of thermal dryer system control stations.

§ 208.141 (relating to control stations; location) incorporates by reference 30 CFR 77.309-1 (relating to control stations; location). This provision requires thermal dryer control stations to be located so as to give the operator of the control system the widest field of visibility of the system and equipment.

§ 208.142 (relating to control panels) incorporates by reference 30 CFR 77.310 (relating to control panels). This provision requires control panels to be located in areas free of moisture and requires control panels to be accompanied by diagrams and directions for use.

§ 208.143 (relating to alarm devices) incorporates by reference 30 CFR 77.311 (relating to alarm devices). This provision mandates that thermal dryer systems be equipped with audible and visible alarm devices.

§ 208.144 (relating to fail safe monitoring systems) incorporates by reference 30 CFR 77.312 (relating to fail safe monitoring systems). This provision provides that fail safe monitoring systems and controls must accompany thermal dryer systems to ensure the dryer system is safely shut down in the event of a failure of any component of the dryer system.

§ 208.145 (relating to wet-coal feed bins; low-level indicators) incorporates by reference 30 CFR 77.313 (relating to wet-coal feed bins; low-level indicators). This provision provides that the wet-coal bins feeding the thermal drying systems must be equipped with audible and visual low-coal-level indicators.

§ 208.146 (relating to automatic temperature control instruments) incorporates by reference 30 CFR 77.314 (relating to automatic temperature control instruments). This provision dictates the type, use and inspection requirements for automatic temperature control instruments associated with thermal dryer systems.

§ 208.147 (relating to thermal dryers; examination and inspection) incorporates by reference 30 CFR 77.315 (relating to thermal dryers; examination and inspection). This provision mandates the examination of thermal dryer systems for fires and coal-dust accumulations.

Safeguards for mechanical equipment

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing safeguards for mechanical equipment.

§ 208.151 (relating to mechanical equipment guards) incorporates by reference 30 CFR 77.400 (relating to mechanical equipment guards). This provision requires parts of mechanical equipment to be guarded to prevent accidents and injuries to workers.

§ 208.152 (relating to stationary grinding machines; protective devices) incorporates by reference 30 CFR 77.401 (relating to stationary grinding machines; protective devices). This provision requires stationary grinding machines to be equipped with parts and certain protective devices to protect workers.

§ 208.153 (relating to hand-held power tools; safety devices) incorporates by reference 30 CFR 77.402 (relating to hand-held power tools; safety devices). This provision mandates that hand-held power tools must be equipped with controls requiring constant hand or finger pressure to operate and must be equipped with friction or equivalent safety devices.

§ 208.154 (relating to mobile equipment; falling object protective structures) incorporates by reference 30 CFR 77.403 (relating to mobile equipment; falling object protective structures (FOPS)). This provision requires falling object protective structures to be installed to certain types of equipment at the surface work areas of underground mine sites.

§ 208.155 (relating to mobile equipment; rollover protective structures) relates to rollover protective structures (ROPS) for mobile equipment and provides that all rubber-tired or crawler-mounted self-propelled scrapers front-end loaders, dozers, cranes, loaders and tractors, with or without attachments, at the surface work areas of underground coal mines shall be provided with ROPS in accordance with the certification requirements approved by the MSHA.

§ 208.156 (relating to seat belts) incorporates by reference 30 CFR 77.403-1(g) (relating to mobile equipment; rollover protective structures (ROPS)). This provision requires the use of seat belts by operators of mobile equipment that are required to be equipped with ROPS.

§ 208.157 (relating to machinery and equipment; operation and maintenance) incorporates by reference 30 CFR 77.404 (relating to machinery and equipment; operation and maintenance). This provision dictates operation and maintenance requirements for machinery and equipment.

§ 208.158 (relating to performing work from a raised position; safeguards) incorporates by reference 30 CFR 77.405 (relating to performing work from a raised position; safeguards). This provision provides that workers may not work on or from a piece of mobile equipment in a

raised position unless it has been securely blocked in place. Moreover, work may not be performed under machinery or equipment that is raised until it is securely blocked in place.

§ 208.159 (relating to drive belts) incorporates by reference 30 CFR 77.406 (relating to drive belts). This provision dictates the use of drive belts for machines.

§ 208.160 (relating to power-driven pulleys) incorporates by reference 30 CFR 77.407 (relating to power-driven pulleys). This provision mandates that belts, chains and ropes may not be guided onto a power-driven moving pulley or similar system with the hands and pulleys of conveyors may not be manually cleaned while the conveyor is in motion.

§ 208.161 (relating to welding operations) incorporates by reference 30 CFR 77.408 (relating to welding operations). This provision requires welding operations to be shielded and the area well-ventilated.

§ 208.162 (relating to shovels, draglines and tractors) incorporates by reference 30 CFR 77.409 (relating to shovels, draglines, and tractors). This provision dictates the use of shovels, draglines and tractors and requires shovels and draglines to be equipped with handrails.

§ 208.163 (relating to mobile equipment; automatic warning devices) incorporates by reference 30 CFR 77.410 (relating to mobile equipment; automatic warning devices). This provision provides that mobile equipment such as forklifts and front-end loaders must be equipped with warning devices and dictates the types of warning those devices emit.

§ 208.164 (relating to compressed air and boilers; general) incorporates by reference 30 CFR 77.411 (relating to compressed air and boilers; general). This provision requires boilers and pressure vessels to be constructed, installed and maintained in accordance with the standards and specifications of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code.

§ 208.165 (relating to compressed air systems) incorporates by reference 30 CFR 77.412 (relating to compressed air systems). This provision specifies the operation and maintenance requirements for compressed air systems.

§ 208.166 (relating to boilers) incorporates by reference 30 CFR 77.413 (relating to boilers). This provision provides the operation and maintenance requirements for boilers.

Electrical equipment—general

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing electrical equipment.

§ 208.171 (relating to electric power circuits and electric equipment; de-energization) incorporates by reference 30 CFR 77.500 (relating to electric power circuits and electric equipment; deenergization). This provision requires power circuits and electric equipment to be de-energized before work is done on circuits and equipment.

§ 208.172 (relating to electric distribution circuits and equipment; repair) incorporates by reference 30 CFR 77.501 (relating to electric distribution circuits and equipment; repair). This provision provides that repair of electric distribution circuits and equipment shall be conducted by a qualified person.

§ 208.173 (relating to qualified person) incorporates by reference 30 CFR 77.501-1 (relating to qualified person). This provision provides that a qualified person for the purposes of § 208.131 is one that meets the requirements of § 208.83 (relating to power centers).

§ 208.174 (relating to electric equipment; examination, testing and maintenance) incorporates by reference 30 CFR 77.502 (relating to electric equipment; examination, testing, and maintenance). This provision requires electric equipment to be frequently examined and tested and properly maintained.

§ 208.175 (relating to qualified person) incorporates by reference 30 CFR 77.502-1 (relating to qualified person). This provision provides that a qualified person for the purposes of § 208.133 is one that meets the requirements of § 208.83.

§ 208.176 (relating to electric equipment; frequency of examination and testing) incorporates by reference 30 CFR 77.502-2 (relating to electric equipment; frequency of examination and testing). This provision requires at least monthly testing of electric equipment.

§ 208.177 (relating to electric conductors; capacity and insulation) incorporates by reference 30 CFR 77.503 (relating to electric conductors; capacity and insulation). This provision mandates size and current carrying capacity requirements for electric conductors.

§ 208.178 (relating to electric conductors) incorporates by reference 30 CFR 77.503-1 (relating to electric conductors). This provision requires electric conductors to meet size and minimum current carrying capacity requirements provided for in the National Electric Code. There is a similar minimum standard for trailing cables in this provision as well.

§ 208.179 (relating to electrical connections or splices; suitability) incorporates by reference 30 CFR 77.504 (relating to electrical connections or splices; suitability). This provision specifies that electrical connections or splices must be mechanically and electrically efficient.

§ 208.180 (relating to cable fittings; suitability) incorporates by reference 30 CFR 77.505 (relating to cable fittings; suitability). This provision dictates that cables must enter metal frames of motors, splice boxes and electric compartments only through proper fittings.

§ 208.181 (relating to electric equipment and circuits; overload and short-circuit protection) incorporates by reference 30 CFR 77.506 (relating to electric equipment and circuits; overload and short-circuit protection). This provision mandates that automatic circuit-breaking devices or fuses of the correct type and capacity shall be installed to protect electric equipment and circuits from overload and short-circuit.

§ 208.182 (relating to electric equipment and circuits; overload and short-circuit protection; minimum requirements) incorporates by reference 30 CFR 77.506-1 (relating to electric equipment and circuits; overload and short circuit protection; minimum requirements). This provision requires devices providing overload or short-circuit protection to conform to the minimum requirements for protection of electric circuits and equipment in the National Electric Code.

§ 208.183 (relating to electric equipment; switches) incorporates by reference 30 CFR 77.507 (relating to electric equipment; switches). This provision requires all electric equipment to be provided with switches or other controls that are safely designed.

§ 208.184 (relating to lightning arresters; ungrounded and exposed power conductors and telephone wires) incorporates by reference 30 CFR 77.508 (relating to lightning arresters, ungrounded and exposed power conductors and telephone wires). This provision requires all underground, exposed power conductors and telephone wires to be equipped with suitable lighting arresters.

§ 208.185 (relating to lightning arresters; wires entering buildings) incorporates by reference 30 CFR 77.508-1 (relating to lightning arresters; wires entering buildings). This provision provides that lighting arresters shall be provided at the point where telephone wires enter a building.

§ 208.186 (relating to transformers; installation and guarding) incorporates by reference 30 CFR 77.509 (relating to transformers; installation and guarding). This provision dictates the installation and guarding requirements for transformers.

§ 208.187 (relating to resistors; location and guarding) incorporates by reference 30 CFR 77.510 (relating to resistors; location and guarding). This provision requires resistors, heaters and rheostats to be located to minimize fires and hazards.

§ 208.188 (relating to danger signs at electrical installations) incorporates by reference 30 CFR 77.511 (relating to danger signs at electrical installations). This provision specifies that suitable danger signs shall be posted at all major electrical installations.

§ 208.189 (relating to inspection and cover plates) incorporates by reference 30 CFR 77.512 (relating to inspection and cover plates). This provision dictates that inspection and cover plates on electrical equipment shall be kept in place at all times except during repair.

§ 208.190 (relating to insulating mats at power switches) incorporates by reference 30 CFR 77.513 (relating to insulating mats at power switches). This provision requires nonconductive material to be kept in place at all switchboards and power-control switches.

§ 208.191 (relating to switchboards; passageways and clearance) incorporates by reference 30 CFR 77.514 (relating to switchboards; passageways and clearance). This provision requires switchboards to be installed to provide passageways permitting access the back of the switchboard from both ends for inspection, adjustment or repair. Openings are to be guarded.

§ 208.192 (relating to bare signal or control wires; voltage) incorporates by reference 30 CFR 77.515 (relating to bare signal or control wires; voltage). This provision requires the voltage on bare signal or control wires accessible to personal contact to not exceed 40 volts.

§ 208.193 (relating to electric wiring and equipment; installation and maintenance) incorporates by reference 30 CFR 77.516 (relating to electric wiring and equipment; installation and maintenance). This provision requires all wiring and electric equipment to meet the requirements of the National Electric Code in effect at the time of installation.

Trailing cables

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing trailing cables.

§ 208.201 (relating to trailing cables; short-circuit protection; disconnecting devices) incorporates by reference 30 CFR 77.600 (relating to trailing cables; short-circuit protection; disconnecting devices). This provision requires short-circuit protection for trailing cables to be provided by automatic circuit breakers. Moreover, disconnecting devices used to disconnect power from trailing cables shall be plainly marked.

§ 208.202 (relating to trailing cables or portable cables; temporary splices) incorporates by reference 30 CFR 77.601 (relating to trailing cables or portable cables; temporary splices). This provision specifies how temporary splices in trailing or portable cables are to be made.

§ 208.203 (relating to permanent splicing of trailing cables) incorporates by reference 30 CFR 77.602 (relating to permanent splicing of trailing cables). This provision provides specifications for when permanent splices in trailing cables are made.

§ 208.204 (relating to clamping of trailing cables to equipment) incorporates by reference 30 CFR 77.603 (relating to clamping of trailing cables to equipment). This provision requires trailing cables to be clamped to machines in a manner that protects the cables from damage.

§ 208.205 (relating to protection of trailing cables) incorporates by reference 30 CFR 77.604 (relating to protection of trailing cables). This provision requires trailing cables to be adequately protected.

§ 208.206 (relating to breaking trailing cable and power cable connections) incorporates by reference 30 CFR 77.605 (relating to breaking trailing cable and power cable connections). This provision mandates that trailing and power cable connections may not be made or broken under load.

§ 208.207 (relating to energized trailing cables; handling) incorporates by reference 30 CFR 77.606 (relating to energized trailing cables; handling). This provision requires persons handling energized trailing cables to wear protective gloves.

§ 208.208 (relating to rubber gloves; minimum requirements) incorporates by reference 30 CFR 77.606-1 (relating to rubber gloves; minimum requirements). This provision provides the minimum requirements for the use of rubber gloves when handling energized trailing cables.

Grounding

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing grounding.

§ 208.211 (relating to grounding metallic sheaths, armors and conduits enclosing power conductors) incorporates by reference 30 CFR 77.700 (relating to grounding metallic sheaths, armors, and conduits enclosing power conductors). This provision requires the metallic sheaths, armors and conduits enclosing power conductors to be electrically continuous throughout and to be grounded by approved methods.

§ 208.212 (relating to approved methods of grounding) incorporates by reference 30 CFR 77.700-1 (relating to approved methods of grounding). This provision dictates the approved methods of grounding.

§ 208.213 (relating to grounding metallic frames, casings and other enclosures of electric equipment) incorporates by reference 30 CFR 77.701 (relating to grounding metallic frames, casings, and other enclosures of electric equipment). This provision provides that metallic frames, casings and other enclosures of electric equipment that may become live must be grounded.

§ 208.214 (relating to approved methods of grounding of equipment receiving power from ungrounded alternating current power systems) incorporates by reference 30 CFR 77.701-1 (relating to approved methods of grounding of equipment receiving power from ungrounded alternating current power systems). This provision specifies the approved methods of grounding equipment receiving power from underground alternating current systems.

§ 208.215 (relating to approved methods of grounding metallic frames, casings and other enclosures of electric equipment receiving power from a direct-current power system) incorporates by reference 30 CFR 77.701-2 (relating to approved methods of grounding metallic frames, casings, and other enclosures of electric equipment receiving power from a direct-current power system). This provision specifies the approved methods of grounding metallic frames, casings and other enclosures of electric equipment receiving power from a direct-current power system.

§ 208.216 (relating to grounding wires; capacity) incorporates by reference 30 CFR 77.701-3 (relating to grounding wires; capacity). This provision specifies the approval requirements when grounding wires are used to ground metallic sheaths, armors, conduits, frames, casings and other metallic enclosures.

§ 208.217 (relating to use of grounding connectors) incorporates by reference 30 CFR 77.701-4 (relating to use of grounding connectors). This provision requires clamps to be used or installed when attaching grounding wires to grounded power conductors.

§ 208.218 (relating to protection other than grounding) incorporates by reference 30 CFR 77.702 (relating to protection other than grounding). This provision permits the use of protective methods other than grounding when these methods are approved and no less effective than grounding.

§ 208.219 (relating to grounding frames of stationary high-voltage equipment receiving power from ungrounded delta systems) incorporates by reference 30 CFR 77.703 (relating to grounding frames of stationary high-voltage equipment receiving power from ungrounded delta systems). This provision requires the frames of stationary high-voltage equipment receiving power from ungrounded delta systems to be grounded.

§ 208.220 (relating to approved methods of grounding) incorporates by reference 30 CFR 77.703-1 (relating to approved methods of grounding). This provision specifies which methods of grounding will be approved with respect to the grounding of frames of high-voltage equipment.

§ 208.221 (relating to work on high-voltage lines; de-energizing and grounding) incorporates by reference 30 CFR 77.704 (relating to work on high-voltage lines; deenergizing and grounding). This provision requires high-voltage lines to be de-energized and grounded prior to work being started on them.

§ 208.222 (relating to work on high-voltage lines) incorporates by reference 30 CFR 77.704-1 (relating to work on high-voltage lines). This provision specifies requirements for working on high-voltage lines.

§ 208.223 (relating to repairs to energized high-voltage lines) incorporates by reference 30 CFR 77.704-2 (relating to repairs to energized high-voltage lines). This provision identifies the specifications for when and how high-voltage lines may be repaired.

§ 208.224 (relating to work on energized high-voltage surface lines; reporting) incorporates by reference 30 CFR 77.704-3 (relating to work on energized high-voltage surface lines; reporting). This provision requires records of repairs to high-voltage lines to be maintained.

§ 208.225 (relating to simultaneous repairs) incorporates by reference 30 CFR 77.704-4 (relating to simultaneous repairs). This provision requires workers to work simultaneously when working on high-voltage lines within reach of each other.

§ 208.226 (relating to installation of protective equipment) incorporates by reference 30 CFR 77.704-5 (relating to installation of protective equipment). This provision requires protective equipment to be installed prior to beginning work on high-voltage lines.

§ 208.227 (relating to protective clothing; use and inspection) incorporates by reference 30 CFR 77.704-6 (relating to protective clothing; use and inspection). This provision requires workers to wear protective clothing when performing work on high-voltage lines.

§ 208.228 (relating to protective equipment; inspection) incorporates by reference 30 CFR 77.704-7 (relating to protective equipment; inspection). This provision requires the visual inspection of protective equipment and clothing.

§ 208.229 (relating to protective equipment; testing and storage) incorporates by reference 30 CFR 77.704-8 (relating to protective equipment; testing and storage). This provision requires protective equipment to be tested and stored properly and in compliance with certain standards.

§ 208.230 (relating to operating disconnecting or cutout switches) incorporates by reference 30 CFR 77.704-9 (relating to operating disconnecting or cutout switches). This provision mandates that disconnecting or cutout switches on high-voltage lines shall only be operated with insulated sticks, fuse tongs or pullers which are adequately insulated.

d § 208.231 (relating to tying into energized high-voltage surface circuits) incorporates by reference 30 CFR 77.704-10 (relating to tying into energized high-voltage surface circuits). This provision requires workers tying into high-voltage surface circuits to wear protective clothing and employ protective equipment.

§ 208.232 (relating to use of grounded messenger wires; ungrounded systems) incorporates by reference 30 CFR 77.704-11 (relating to use of grounded messenger wires; ungrounded systems). This provision permits the use of grounded messenger wires to suspend cables of systems to serve as a grounding medium.

§ 208.233 (relating to guy wires; grounding) incorporates by reference 30 CFR 77.705 (relating to guy wires; grounding). This provision requires guy wires from poles supporting high-voltage transmission lines to be securely connected.

Surface high-voltage distribution

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing surface high-voltage distribution.

§ 208.241 (relating to high-voltage circuits; circuit breakers) incorporates by reference 30 CFR 77.800 (relating to high-voltage circuits; circuit breakers). This provision provides that high-voltage circuits providing power to portable or mobile equipment must be protected by suitable circuit breakers.

§ 208.242 (relating to testing, examination and maintenance of circuit breakers; procedures) incorporates by reference 30 CFR 77.800-1 (relating to testing, examination, and maintenance of circuit breakers; procedures). This provision provides the testing and examination procedures for circuit breakers.

§ 208.243 (relating to testing, examination and maintenance of circuit breakers; record) incorporates by reference 30 CFR 77.800-2 (relating to testing, examination, and maintenance of circuit breakers; record). This provision requires written records to be kept for tests of circuit breakers.

§ 208.244 (relating to grounding resistors) incorporates by reference 30 CFR 77.801 (relating to grounding resistors). This provision requires grounding resistors, when required, to be of the proper ohmic value to limit the voltage drop in the grounding circuit external to the resistor to no more than 100 volts under fault conditions.

§ 208.245 (relating to grounding resistors; continuous current rating) incorporates by reference 30 CFR 77.801-1 (relating to grounding resistors; continuous current rating). This provision requires the current rating of grounding resistors to meet the extended time rating in American Institute of Electrical Engineering Standard No. 32.

§ 208.246 (relating to protection of high-voltage circuits; neutral grounding resistors; disconnecting devices) incorporates by reference 30 CFR 77.802 (relating to protection of high-voltage circuits; neutral grounding resistors; disconnecting devices). This provision requires high-voltage circuits supplying portable or mobile equipment to contain either a direct or derived neutral which must be grounded through a suitable resistor.

§ 208.247 (relating to fail safe ground check circuits on high-voltage resistance grounded systems) incorporates by reference 30 CFR 77.803 (relating to fail safe ground check circuits on high-voltage resistance grounded systems). This provision requires high-voltage, resistance grounded systems to include a fail safe ground check circuit or other no less effective device.

§ 208.248 (relating to fail safe ground check circuits; maximum voltage) incorporates by reference 30 CFR 77.803-1 (relating to fail safe ground check circuits; maximum voltage). This provision specifies that the maximum voltage used for ground check circuits under the previous subsection may not exceed 96 volts.

§ 208.249 (relating to ground check systems not employing pilot check wires; approval by the Secretary of the United States Department of Labor) incorporates by reference 30 CFR 77.803-2 (relating to ground check systems not employing pilot check wires; approval by the Secretary). This provision permits approval of ground check systems not employing pilot check wires when it is determined that the system includes a fail safe design.

§ 208.250 (relating to high-voltage trailing cables; minimum design requirements) incorporates by reference 30 CFR 77.804 (relating to high-voltage trailing cables; minimum design requirements). This provision provides the minimum design requirements for high-voltage trailing cables.

§ 208.251 (relating to cable couplers and connection boxes; minimum design requirements) incorporates by reference 30 CFR 77.805 (relating to cable couplers and connection boxes; minimum design requirements). This provision provides the minimum design requirements for cable couplers and connection boxes.

§ 208.252 (relating to connection of single-phase loads) incorporates by reference 30 CFR 77.806 (relating to connection of single-phase loads). This provision requires single-phase loads to be connected phase-to-phase in resistance grounded systems.

§ 208.253 (relating to installation of high-voltage transmission cables) incorporates by reference 30 CFR 77.807 (relating to installation of high-voltage transmission cables). This provision mandates that high-voltage transmission cables shall be installed or placed to afford protection against damage.

§ 208.254 (relating to high-voltage powerlines; clearances above ground) incorporates by reference 30 CFR 77.807-1 (relating to high-voltage powerlines; clearances above ground). This provision requires high-voltage powerlines located above driveways, haulageways and railroad tracks to be installed to provide the minimum vertical clearance specified in the National Electric Safety Code. A powerline may not be installed less than 15 feet above ground.

§ 208.255 (relating to booms and masts; minimum distance from high-voltage lines) incorporates by reference 30 CFR 77.807-2 (relating to booms and masts; minimum distance from high-voltage lines). This provision specifies that booms and masts of equipment operated on the surface may not be operated within 10 feet of an overhead energized powerline.

§ 208.256 (relating to movement of equipment; minimum distance from high-voltage lines) incorporates by reference 30 CFR 77.807-3 (relating to movement of equipment; minimum distance from high-voltage lines). This provision specifies the minimum distance requirements from high-voltage powerlines for moving equipment.

§ 208.257 (relating to disconnecting devices) incorporates by reference 30 CFR 77.808 (relating to disconnecting devices). This provision requires disconnecting devices to be installed at the beginning of each branch line in a high-voltage circuit.

§ 208.258 (relating to identification of circuit breakers and disconnecting switches) incorporates by reference 30 CFR 77.809 (relating to identification of circuit breakers and disconnecting switches). This provision requires circuit breakers and disconnection switches to be labelled to show the units they control.

§ 208.259 (relating to high-voltage equipment; grounding) incorporates by reference 30 CFR 77.810 (relating to high-voltage equipment; grounding). This provision requires frames, supporting structures and enclosures of stationary, portable or mobile high-voltage equipment to be grounded.

§ 208.260 (relating to movement of portable substations and transformers) incorporates by reference 30 CFR 77.811 (relating to movement of portable substations and transformers). This provision requires portable substations and transformers to be de-energized before moving.

Low-voltage and medium-voltage alternating current

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing low-voltage and medium-voltage alternating current.

§ 208.271 (relating to low-voltage and medium-voltage circuits serving portable or mobile three-phase alternating current equipment; circuit breakers) incorporates by reference 30 CFR 77.900 (relating to low- and medium-voltage circuits serving portable or mobile three-phase alternating current equipment; circuit breakers).

§ 208.272 (relating to testing, examination and maintenance of circuit breakers; procedures) incorporates by reference 30 CFR 77.900-1 (relating to testing, examination, and maintenance of circuit breakers; procedures).

§ 208.273 (relating to testing, examination and maintenance of circuit breakers; record) incorporates by reference 30 CFR 77.900-2 (relating to testing, examination, and maintenance of circuit breakers; record).

§ 208.274 (relating to protection of low-voltage and medium-voltage three-phase circuits) incorporates by reference 30 CFR 77.901 (relating to protection of low- and medium-voltage three-phase circuits).

§ 208.275 (relating to grounding resistor; continuous current rating) incorporates by reference 30 CFR 77.901-1 (relating to grounding resistor; continuous current rating).

§ 208.276 (relating to low-voltage and medium-voltage ground check monitor circuits) incorporates by reference 30 CFR 77.902 (relating to low- and medium-voltage ground check monitor circuits).

§ 208.277 (relating to fail safe ground check circuits; maximum voltage) incorporates by reference 30 CFR 77.902-1 (relating to fail safe ground check circuits; maximum voltage).

§ 208.278 (relating to approved ground check systems not employing pilot check wires) incorporates by reference 30 CFR 77.902-2 (relating to approved ground check systems not employing pilot check wires).

§ 208.279 (relating to attachment of ground conductors and ground check wires to equipment frames; use of separate connections) incorporates by reference 30 CFR 77.902-3 (relating to attachment of ground conductors and ground check wires to equipment frames; use of separate connections).

§ 208.280 (relating to disconnecting devices) incorporates by reference 30 CFR 77.903 (relating to disconnecting devices).

§ 208.281 (relating to identification of circuit breakers) incorporates by reference 30 CFR 77.904 (relating to identification of circuit breakers).

§ 208.282 (relating to connection of single-phase loads) incorporates by reference 30 CFR 77.905 (relating to connection of single-phase loads).

§ 208.283 (relating to trailing cables supplying power to low-voltage mobile equipment; ground wires and ground check wires) incorporates by reference 30 CFR 77.906 (relating to trailing cables supplying power to low-voltage mobile equipment; ground wires and ground check wires).

Ground control

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing ground control.

§ 208.291 (relating to highwalls, pits and spoil banks; plans) incorporates by reference 30 CFR 77.1000 (relating to highwalls, pits and spoil banks; plans).

§ 208.292 (relating to filing of plan) incorporates by reference 30 CFR 77.1000-1 (relating to filing of plan).

§ 208.293 (relating to stripping; loose material) incorporates by reference 30 CFR 77.1001 (relating to stripping; loose material).

§ 208.294 (relating to box cuts; spoil material placement) incorporates by reference 30 CFR 77.1002 (relating to box cuts; spoil material placement).

§ 208.295 (relating to benches) incorporates by reference 30 CFR 77.1003 (relating to benches).

§ 208.296 (relating to ground control; inspections and maintenance; general) incorporates by reference 30 CFR 77.1004 (relating to ground control; inspection and maintenance; general).

§ 208.297 (relating to scaling highwalls; general) incorporates by reference 30 CFR 77.1005 (relating to scaling highwalls; general).

§ 208.298 (relating to highwalls; men working) incorporates by reference 30 CFR 77.1006 (relating to highwalls; men working).

§ 208.299 (relating to drilling; general) incorporates by reference 30 CFR 77.1007 (relating to drilling; general).

§ 208.300 (relating to relocation of drills; safeguards) incorporates by reference 30 CFR 77.1008 (relating to relocation of drills; safeguards).

§ 208.301 (relating to drill; operation) incorporates by reference 30 CFR 77.1009 (relating to drill; operation).

§ 208.302 (relating to collaring holes) incorporates by reference 30 CFR 77.1010 (relating to collaring holes).

§ 208.303 (relating to drill holes; guarding) incorporates by reference 30 CFR 77.1011 (relating to drill holes; guarding).

§ 208.304 (relating to jackhammers; operation; safeguards) incorporates by reference 30 CFR 77.1012 (relating to jackhammers; operation; safeguards).

§ 208.305 (relating to air drills; safeguards) incorporates by reference 30 CFR 77.1013 (relating to air drills; safeguards).

Fire protection

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing fire protection.

§ 208.311 (relating to fire protection; training and organization) incorporates by reference 30 CFR 77.1100 (relating to fire protection; training and organization).

§ 208.312 (relating to escape and evacuation; plan) incorporates by reference 30 CFR 77.1101 (relating to escape and evacuation; plan).

§ 208.313 (relating to warning signs; smoking and open flame) incorporates by reference 30 CFR 77.1102 (relating to warning signs; smoking and open flame).

§ 208.314 (relating to flammable liquids; storage) incorporates by reference 30 CFR 77.1103 (relating to flammable liquids; storage).

§ 208.315 (relating to accumulations of combustible materials) incorporates by reference 30 CFR 77.1104 (relating to accumulations of combustible materials).

§ 208.316 (relating to internal combustion engines; fueling) incorporates by reference 30 CFR 77.1105 (relating to internal combustion engines; fueling).

§ 208.317 (relating to battery-charging stations; ventilation) incorporates by reference 30 CFR 77.1106 (relating to battery-charging stations; ventilation).

§ 208.318 (relating to belt conveyors) incorporates by reference 30 CFR 77.1107 (relating to belt conveyors).

§ 208.319 (relating to firefighting equipment; requirements; general) incorporates by reference 30 CFR 77.1108 (relating to firefighting equipment; requirements; general).

§ 208.320 (relating to type and capacity of firefighting equipment) incorporates by reference 30 CFR 77.1108-1 (relating to type and capacity of firefighting equipment).

§ 208.321 (relating to quantity and location of firefighting equipment) incorporates by reference 30 CFR 77.1109 (relating to quantity and location of firefighting equipment).

§ 208.322 (relating to examination and maintenance of firefighting equipment) incorporates by reference 30 CFR 77.1110 (relating to examination and maintenance of firefighting equipment).

§ 208.323 (relating to welding, cutting and soldering; use of fire extinguisher) incorporates by reference 30 CFR 77.1111 (relating to welding, cutting, soldering; use of fire extinguisher).

§ 208.324 (relating to welding, cutting or soldering with arc or flame; safeguards) incorporates by reference 30 CFR 77.1112 (relating to welding, cutting, soldering with arc or flame; safeguards).

Maps

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing maps.

§ 208.331 (relating to mine map) incorporates by reference 30 CFR 77.1200 (relating to mine map). This provision specifies the requirements for mine maps.

§ 208.332 (relating to certification of mine maps) incorporates by reference 30 CFR 77.1201 (relating to certification of mine maps). This provision identifies certification requirements for mine maps.

§ 208.333 (relating to availability of mine map) incorporates by reference 30 CFR 77.1202 (relating to availability of mine map). This provision requires mine maps to be available for inspection.

Personnel hoisting

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing personnel hoisting.

§ 208.341 (relating to personnel hoists and elevators) incorporates by reference 30 CFR 77.1400 (relating to personnel hoists and elevators).

§ 208.342 (relating to automatic controls and brakes) incorporates by reference 30 CFR 77.1401 (relating to automatic controls and brakes).

§ 208.343 (relating to rated capacity) incorporates by reference 30 CFR 77.1402 (relating to rated capacity).

§ 208.344 (relating to maximum load; posting) relates to posting a load maximum for elevators and hoists and incorporates by reference 30 CFR 77.1402-1 (relating to maximum load; posting).

§ 208.345 (relating to daily examination of hoisting equipment) incorporates by reference 30 CFR 77.1403 (relating to daily examination of hoisting equipment).

§ 208.346 (relating to certifications and records of daily examinations) incorporates by reference 30 CFR 77.1404 (relating to certifications and records of daily examinations).

§ 208.347 (relating to operation of hoisting equipment after repairs) incorporates by reference 30 CFR 77.1405 (relating to operation of hoisting equipment after repairs).

Wire ropes

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing wire ropes.

§ 208.351 (relating to wire ropes; scope) incorporates by reference 30 CFR 77.1430 (relating to wire ropes; scope).

§ 208.352 (relating to minimum rope strength) incorporates by reference 30 CFR 77.1431 (relating to minimum rope strength).

§ 208.353 (relating to initial measurement) incorporates by reference 30 CFR 77.1432 (relating to initial measurement).

§ 208.354 (relating to examinations) incorporates by reference 30 CFR 77.1433 (relating to examinations).

§ 208.355 (relating to retirement criteria) incorporates by reference 30 CFR 77.1434 (relating to retirement criteria).

§ 208.356 (relating to load end attachments) incorporates by reference 30 CFR 77.1435 (relating to load end attachments).

§ 208.357 (relating to drum end attachment) incorporates by reference 30 CFR 77.1436 (relating to drum end attachment).

§ 208.358 (relating to end attachment retermination) incorporates by reference 30 CFR 77.1437 (relating to end attachment retermination).

§ 208.359 (relating to end attachment replacement) incorporates by reference 30 CFR 77.1438 (relating to end attachment replacement).

Loading and haulage

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing loading and haulage.

§ 208.361 (relating to loading and haulage; general) incorporates by reference 30 CFR 77.1600 (relating to loading and haulage; general).

§ 208.362 (relating to transportation of persons; restrictions) incorporates by reference 30 CFR 77.1601 (relating to transportation of persons; restrictions).

§ 208.363 (relating to trains and locomotives; authorized persons) incorporates by reference 30 CFR 77.1603 (relating to trains and locomotives; authorized persons).

§ 208.364 (relating to transportation of persons; overcrowding) incorporates by reference 30 CFR 77.1604 (relating to transportation of persons; overcrowding). In response to IRRC's comment, the Board removed the modification to the prohibition of overcrowding man-trip vehicles or other conveyances, which applied the prohibition to "surface work areas of underground bituminous coal mines," to clarify that the final-form regulation is consistent with the Federal provision.

§ 208.365 (relating to loading and haulage equipment; installations) incorporates by reference 30 CFR 77.1605 (relating to loading and haulage equipment; installations).

§ 208.366 (relating to loading and haulage equipment; inspection and maintenance) incorporates by reference 30 CFR 77.1606 (relating to loading and haulage equipment; inspection and maintenance).

§ 208.367 (relating to loading and haulage equipment; operation) incorporates by reference 30 CFR 77.1607 (relating to loading and haulage equipment; operation).

§ 208.368 (relating to dumping facilities) incorporates by reference 30 CFR 77.1608 (relating to dumping facilities).

Miscellaneous

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing miscellaneous provisions from the Federal regulations.

§ 208.371 (relating to communications in work areas) incorporates by reference 30 CFR 77.1700 (relating to communications in work areas).

§ 208.372 (relating to first aid equipment; location; minimum requirements) incorporates by reference 30 CFR 77.1707 (relating to first aid equipment; location; minimum requirements).

§ 208.373 (relating to protective clothing; requirements) incorporates by reference 30 CFR 77.1710 (relating to protective clothing; requirements).

§ 208.374 (relating to distinctively colored hard hats or hard caps; identification for newly employed, inexperienced miners) incorporates by reference 30 CFR 77.1710-1 (relating to distinctively colored hard hats or hard caps; identification for newly employed, inexperienced miners).

§ 208.375 (relating to smoking prohibition) incorporates by reference 30 CFR 77.1711 (relating to smoking prohibition).

Trolley wires and trolley feeder wires

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing trolley wires and trolley feeder wires.

§ 208.381 (relating to cutout switches) incorporates by reference 30 CFR 77.1800 (relating to cutout switches).

§ 208.382 (relating to overcurrent protection) incorporates by reference 30 CFR 77.1801 (relating to overcurrent protection).

§ 208.383 (relating to devices for overcurrent protection) incorporates by reference 30 CFR 77.1801-1 (relating to devices for overcurrent protection).

§ 208.384 (relating to insulation of trolley wires, trolley feeder wires and bare signal wires; guarding of trolley wires and trolley feeder wires) incorporates by reference 30 CFR 77.1802 (relating to insulation of trolley wires, trolley feeder wires and bare signal wires; guarding of trolley wires and trolley feeder wires).

Slope and shaft sinking

The following additions to Chapter 208 incorporate by reference the Federal mine safety regulations governing slope and shaft sinking.

§ 208.391 (relating to slopes and shafts; approval of plans) incorporates by reference 30 CFR 77.1900 (relating to slopes and shafts; approval of plans), and clarifies that the Department, in addition to MSHA, will continue to approve plans related to slope and shaft sinking and construction. In response to IRRC's comment, the Board changed the word "modification" to "addition" to clarify that the final-form provision does not modify the language of any specific provision of the Federal Code, and is not an additional requirement. The Department currently accepts for approval plans submitted to MSHA pursuant to 30 CFR 77.1900. The final form regulation clarifies that although § 208.391 incorporates the Federal provision, the Department retains independent approval authority over such plans.

§ 208.392 (relating to compliance with approved slope and shaft sinking plans) incorporates by reference 30 CFR 77.1900-1 (relating to compliance with approved slope and shaft sinking plans).

§ 208.393 (relating to preshift and onshift inspections; reports) incorporates by reference 30 CFR 77.1901 (relating to preshift and onshift inspections; reports).

§ 208.394 (relating to methane and oxygen deficiency tests; approved devices) incorporates by reference 30 CFR 77.1901-1 (relating to methane and oxygen deficiency tests; approved devices).

§ 208.395 (relating to drilling and mucking operations) incorporates by reference 30 CFR 77.1902 (relating to drilling and mucking operations).

§ 208.396 (relating to permissible diesel-powered equipment) incorporates by reference 30 CFR 77.1902-1 (relating to permissible diesel-powered equipment).

§ 208.397 (relating to hoists and hoisting; minimum requirements) incorporates by reference 30 CFR 77.1903 (relating to hoists and hoisting; minimum requirements).

§ 208.398 (relating to communications between slope and shaft bottoms and hoist operators) incorporates by reference 30 CFR 77.1904 (relating to communications between slope and shaft bottoms and hoist operators).

§ 208.399 (relating to hoist safeguards; general) incorporates by reference 30 CFR 77.1905 (relating to hoist safeguards; general).

§ 208.400 (relating to hoists; daily inspection) incorporates by reference 30 CFR 77.1906 (relating to hoists; daily inspection).

§ 208.401 (relating to hoist construction; general) incorporates by reference 30 CFR 77.1907 (relating to hoist construction; general).

§ 208.402 (relating to hoist installations; use) incorporates by reference 30 CFR 77.1908 (relating to hoist installations; use).

§ 208.403 (relating to hoist operation; qualified hoistman) incorporates by reference 30 CFR 77.1908-1 (relating to hoist operation; qualified hoistman).

§ 208.404 (relating to explosives and blasting; use of permissible explosives and shot-firing units) incorporates by reference 30 CFR 77.1909 (relating to explosives and blasting; use of permissible explosives and shot-firing units).

§ 208.405 (relating to use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager) incorporates by reference 30 CFR 77.1909-1

(relating to use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager).

§ 208.406 (relating to explosives and blasting; general) incorporates by reference 30 CFR 77.1910 (relating to explosives and blasting; general) with a modification that operators comply with relevant provisions of 25 Pa. Code Chapters 210 and 211 (relating to blasters' licenses; and storage, handling and use of explosives). IRRC commented that the proposed "modification" within § 208.406 implies that the modification was an additional requirement from those in the Federal provision. The Board declines to change the language of the final-form regulation. Although § 208.406 incorporates the Federal provision, the final-form regulation clarifies that operators must still comply with the applicable Pennsylvania regulations regarding explosives and blasting.

§ 208.407 (relating to ventilation of slopes and shafts) incorporates by reference 30 CFR 77.1911 (relating to ventilation of slopes and shafts).

§ 208.408 (relating to ladders and stairways) incorporates by reference 30 CFR 77.1912 (relating to ladders and stairways).

§ 208.409 (relating to fire-resistant wood) incorporates by reference 30 CFR 77.1913 (relating to fire-resistant wood).

§ 208.410 (relating to electrical equipment) incorporates by reference 30 CFR 77.1914 (relating to electrical equipment).

§ 208.411 (relating to storage and handling of combustible materials) incorporates by reference 30 CFR 77.1915 (relating to storage and handling of combustible materials).

§ 208.412 (relating to welding, cutting and soldering; fire protection) incorporates by reference 30 CFR 77.1916 (relating to welding, cutting, and soldering; fire protection).

G. *Benefits, Costs and Compliance*

Benefits

The final rulemaking implements existing Federal regulations thereby making them independently enforceable in this Commonwealth. This promotes interaction between the regulated community and the Commonwealth. Furthermore, the definitions in § 208.1 improve the clarity of the regulatory scheme.

Compliance costs

The final rulemaking does not add compliance costs since it implements existing Federal regulations with which mining operators in this Commonwealth already comply.

Paperwork requirements

The final rulemaking does not generate additional paperwork because mining operators must comply with the existing Federal regulations that are implemented by this rulemaking.

H. *Pollution Prevention*

The Federal Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) establishes a National policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally friendly materials, more efficient use of raw materials and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance.

I. *Sunset Review*

The regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether they effectively fulfill the goals for which they are intended.

J. *Regulatory Review*

Under Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), the Department submitted a copy of the final rulemaking on _____, 2015 to the Independent Regulatory Review Commission (IRRC), and the Chairpersons of the Senate and House Environmental Resources and Energy Committees (the Committees) for review and comment. In addition to submitting the final amendments, the Department provided IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department. A copy of this material was available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC and the Committees are to be provided with any documentation requested and public comments. Neither IRRC nor the Committees requested any documentation.

Under section 5.1(j.2) of the Regulatory Review Act, on _____, 2015, these final-form regulations were deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on _____, 2015, and approved the final-form regulations.

K. *Public Comments*

The Board finds that:

(1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202) and regulations promulgated thereunder at 1 Pa. Code §§ 7.1 and 7.2.

(2) A public comment period was provided as required by law.

(3) These regulations do not enlarge the purpose of the proposal published at 44 Pa.B. 5191 (August 02, 2014).

(4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

John Quigley,
Chairperson