Notice of Proposed Rulemaking Department of Environmental Protection Environmental Quality Board 25 Pa. Code Chapter 209 Coal Mines

Preamble

The Environmental Quality Board (Board) proposes to amend Chapter 209 (relating to coal mines) to read as set forth in Annex A. The proposed amendments revoke existing, antiquated anthracite and bituminous safety regulations and replace them with selected federal safety regulations that will be adopted by reference. In addition, selected federal safety regulations for industrial mineral mines will be adopted by reference. Finally, the chapter is renamed to "Surface Mining" to reflect it's broader scope.

| This | proposal | was ado | pted by | the Board | at its me | eeting of | ${f f}$ |
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A. Effective Date

These proposed amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

B. Contact Persons

For further information contact Joseph G. Pizarchik, Director, Bureau of Mining and Reclamation, P.O. Box 8461, Rachel Carson State Office Building, Harrisburg, PA 17105-8461, (717) 787-5103, or Marc Roda, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This proposed rulemaking is available electronically through the Department of Environmental Protection's (Department) Web site (http://www.dep.state.pa.us).

C. Statutory Authority

The amendments are proposed under the authority of:

1. Section 4.2 of the Surface Mining Conservation and Reclamation Act ("SMCRA") and Section 11(a) of the Noncoal Surface Mining Conservation and Reclamation Act ("NSMCRA") (52 P.S. §§ 1396.4b and 3311(a), which authorize the Department to

promulgate regulations for the health and safety of those persons engaged in surface mining and for the protection of the general public.

- 2. Section 2(f) of the General Safety law (43 P.S. § 25-2(f)), which requires, *inter alia*, operators of surface industrial mineral mines to adopt measures to protect persons working therein.
- 3. Sections 1917-A and 1920-A of the Administrative Code of 1929, 71 P.S. §§ 510-17 and 510-20. Sections 1917-A and 1920-A of the Administrative Code of 1929 authorize the Board to adopt regulations to prevent the occurrence of a nuisance and to promulgate such rules and regulations as are necessary for the proper work of the Department.

D. Background and Purpose

The Department's surface mine safety program is implemented through the surface mining conservation inspectors. As part of the mine inspection, the Inspector will identify unsafe conditions and work with the operator to correct those conditions before an accident can occur. The inspector's ability to identify and correct unsafe conditions is hampered by the inadequacy of the surface mining safety regulations, Chapter 209 (relating to coal mines). The provisions of Subchapter A (relating to general safety in bituminous strip mines) are antiquated and differ from safety requirements established by the U.S. Department of Labor, Mine Safety and Health Administration ("MSHA"). This difference in standards is a source of confusion and jeopardizes safety at bituminous surface mines. Other than for blasting, there are no Department safety regulations for anthracite surface mines. The provisions of Subchapter B (relating to explosives in anthracite strip mines) are not only out of date, but also redundant. The use, storage and handling of explosives at anthracite surface mines is addressed by provisions found in Chapter 88 (relating to anthracite mines) and Chapter 211 (relating to the use, storage and handling of explosives). There are no Department regulations specifying safety standards for surface industrial mineral mines.

This proposed rulemaking implements the Rendell Administration's initiative that the Department develop a "world class mine safety program." To implement this initiative it is proposed to rewrite chapter 209 by deleting the existing provisions and adopting new standards for coal and industrial mineral surface mines. For the most part, the proposed regulations adopt by reference MSHA safety standards contained in 30 CFR Part 56 (relating to health and safety standards for metal and non metal mines) and 77 (relating to health and safety standards for surface coal mines and surface work areas of underground coal mines). By adopting the MSHA standards, the Department's safety standards are modernized and additional costs on operators are minimized. Finally, by eliminating inconsistencies between the Department's standards and the MSHA standards, the possibility for confusion in the field is minimized.

In proposing these amendments, the Department's goal is to provide the most improved safety at Pennsylvania surface mines in the most cost effective and the least intrusive manner. The provisions of the MSHA regulations adopted by these regulations are those that address the most significant risk to surface miners in Pennsylvania.

In 1999, the Pennsylvania State University (PSU) published a report entitled "Safety Conditions in Small Surface Bituminous Coal Mines in Pennsylvania." This report analyzed MSHA safety records for 1991 through 1996. The report's findings verify that the Department has selected the appropriate areas to emphasize for safety improvement.

Most of the MSHA violations identified by the PSU study fall within the substantive areas to be covered by these regulations. The substantive areas identified by the study are:

Failure to maintain machinery or equipment in safe operating condition Operation of equipment, which is not in a safe operating condition Neglect in housekeeping Fire hazards and failure to maintain fire-fighting equipment.

Even though the Department is not adopting all of the MSHA health and safety standards, the Department's inspectors will assist the operators in ensuring compliance with the MSHA regulations. If a Pennsylvania inspector observes a violation of a MSHA safety regulation that Pennsylvania has not adopted, the Pennsylvania inspector will, as part of the Department's compliance assistance program, point out the condition and explain that it is a violation of a MSHA regulation and needs to be addressed.

On most surface mine sites, the Department conducts inspections more frequently than MSHA. Effective safety programs rely on the principles of prevention and providing constant reminders of hazards to avoid complacency. With the proposed regulations in place, the higher awareness provided by the Department's inspections will help prevent accidents and result in a safer work environment at Pennsylvania's surface mines.

Interested permittees helped identify the concepts in these proposed regulations. In addition, the Department held 13 informational meetings attended by operators/management, consultants, and miners. The following concerns and recommendations were discussed at these informational meetings:

- 1. The potential for the Department's interpretation or enforcement of a health or safety standard being inconsistent with MSHA's interpretation or enforcement of the same health or safety standard.
- 2. DEP should notify MSHA of violations, or vice versa for the purpose of assessing penalties.
- 3. The Department's inspectors should be adequately trained in the MSHA health and safety standards prior to commencing enforcement.

- 4. If the surface mining safety regulations are to be upgraded, then adopting by reference the MSHA safety regulations is preferred to creating Pennsylvania's own regulations.
- 5. DEP should use proactive compliance assistance with emphasis on preventing accidents, and DEP should use existing enforcement procedures rather than creating new ones or adopting MSHA's enforcement procedures.
- 6. Accidents often result from conditions that may not be present or noticeable during the course of a routine DEP inspection. Therefore, DEP should focus on outreach and training in addition to inspection and enforcement. DEP should develop an outreach program that emphasizes hazard recognition and is pertinent to specific jobs performed within a mine, *e.g.*, training workers who frequently work near highwalls to recognize signs of highwall instability.

At its meeting of January 25, 2007, the Mining and Reclamation Advisory Board ("MRAB") considered this proposed rulemaking, as it applies to surface coal mining. The MRAB unanimously recommended that the Department move forward with the regulations.

E. Summary of Regulatory Requirements

This proposal will rename Chapter 209 as "209A Surface Mining", delete the existing provisions and adopt three new subchapters. These Subchapters are:

- 1. A (relating to surface coal mines).
- 2. B (relating to surface noncoal mines).
- 3. C (relating to miscellaneous provisions).
- I. Subchapter A. Surface Coal Mines.

This subchapter specifies the safety standards applicable to surface mining activities as defined in the SMCRA. *See* § 209A.1 (relating to applicability). Tying this subchapter's applicability to surface mining activities as defined in the SMCRA ensures consistency in the scope of the safety and environmental programs.

a. § 209A.2. Definitions.

The definitions for active workings, berm, and roll protection found in 30 CFR \S 77.2 (relating to definitions) are incorporated herein by reference. Out of all the terms defined in 30 CFR \S 77.2, only these three terms are used in the provisions in 30 CFR Part 77 that are incorporated by reference into Subchapter A.

Not found in 30 CFR Part 77 is the term "competent person." Some of the MSHA regulations adopted by reference address specified duties, *e.g.* pre-shift inspections, to be performed by a person possessing a certificate of qualification. Rather than creating a

certification program, the Department is requiring these duties to be performed by a competent person. *See* § 209A.13 (relating to competent person).

b. § 209A.3. Surface Installations.

Nine of the regulations in 30 CFR part 77 Subpart C (relating to surface installations) are incorporated by reference into Subchapter A. These regulations address the following issues:

- 1. General requirements.
- 2. Safeguards to protect persons below overhead work areas.
- 3. Protection to prevent persons from falling in openings in surface work areas.
- 4. The installation and maintenance of travelways in work areas.
- 5. The installation and maintenance of ladders.
- 6. Illuminating the work area.
- 7. Storing materials at the surface installation.
- 8. Surge and storage piles.
- 9. Hoisting of materials.
 - c. § 209A.4. Safeguards for mechanical equipment.

Seven of the regulations in 30 CFR Part 77 Subpart E (relating to safeguards for mechanical equipment) are incorporated by reference into Subchapter A. These regulations address the following issues:

- 1. Falling object protective structures on mobile equipment.
- 2. Roll over protective structures on mobile equipment.
- 3. The incorporation by reference of non MSHA publications.
- 4. The operation and maintenance of equipment.
- 5. Safeguards for persons working on or around raised equipment.
- 6. The operation of shovels, draglines and tractors.
- 7. Warning devices on mobile equipment.
 - d. § 209A.5. Electrical equipment general.

Two of the regulations in 30 CFR Part 77 Subpart F (relating to electrical equipment general) are incorporated by reference into Subchapter A. These regulations address the following issues:

- 1. De-energizing electrical equipment prior to repair.
- 2. Repairing electrical distribution circuits and equipment.
 - e. § 209A.6. Trailing cables.

The requirement that trailing cables are to be protected to prevent damage from mobile equipment in 30 CFR Part 77.604 (relating to protection of trailing cables) is incorporated by reference into Subchapter A.

f. § 209A.7. Surface high-voltage distribution.

Three of the regulations in 30 CFR Part 77 Subpart I (relating to high-voltage distribution) are incorporated by reference into Subchapter A. These regulations address the following issues:

- 1. The clearance above the ground of high-voltage distribution lines.
- 2. The minimum distance that booms and masts are to be from high-voltage lines.
- 3. Precautions to be taken when moving equipment in proximity to high-voltage lines.
 - g. § 209A.8. Ground Control.

Nine of the regulations in 30 CFR Part 77 Subpart K (relating to ground control) are incorporated by reference into Subchapter A. These regulations address the following issues:

- 1. The removal of loose material from highwalls.
- 2. Preventing of spoil material entering the pit.
- 3. The use of benches to stabilize a highwall.
- 4. The inspection and maintenance of highwalls, banks, benches and sloping terrain.
- 5. The removal of loose rock from highwalls.
- 6. Persons working at highwalls.
- 7. The inspection of drilling equipment.
- 8. The movement of drilling equipment.
- 9. The operation of drilling equipment.
 - h. § 209A.9. Fire protection.

Ten of the regulations in 30 CFR Part 77 Subpart L (relating to fire protection) are incorporated by reference into Subchapter A. These regulations address the following issues:

- 1. The posting of signs warning against smoking or open flames.
- 2. The storage of flammable liquids.
- 3. The accumulation of combustible materials.
- 4. The fueling of internal combustion engines.
- 5. The provision of firefighting equipment.
- 6. The type and capacity of fire fighting equipment
- 7. The location of fire fighting equipment
- 8. The examination and maintenance of fire fighting equipment.

- 9. Placing fire extinguishers where welding, cutting or soldering is occurring.
- 10. The safeguards to be taken when welding, cutting or soldering.
 - i. § 209A.10. Auger mining.

Subsection (a) incorporates by reference into Subchapter A four of the regulations in 30 CFR Part 77 Subpart P (relating to auger mining). These regulations address the following issues:

- 1. Preventing the auger mining from posing a hazard to an adjacent underground mine.
- 2. Inspection of mining operation.
- 3. Safeguards to protect workers from falling rock.
- 4. Operation of auger equipment.

Subsection (b) establishes minimum requirements for using benches to stabilize the highwall. The Department has the authority, on a case-by-case basis, to require more stringent benching requirements. Also, on a case-by-case basis, operators can request the Department to approve less stringent benching requirements.

The MSHA regulations do not contain specific requirements for using benches to stabilize a highwall. This is because the MSHA regulations apply nationally to a variety of different geologic conditions. The use of benches to stabilize the highwall is to be described in the ground control plan, required by 30 CFR § 77.1000 (relating to ground control plan). In Pennsylvania, the geologic conditions in the Bituminous Coal Field are such that strata are near horizontal and the rock types are limited to a few types. Because of this, the geologic conditions are generally predictable making it reasonable to specify minimum benching standards that can be varied on a case-by-case basis, to ensure highwall stability.

Auger mining in the anthracite coal fields is uncommon. Subsection c describes the requirements for auger mining in the anthracite coal fields, where the geology is complex.

j. § 209A.11. Loading and haulage.

Four of the regulations in 30 CFR Part 77 Subpart Q (relating to loading and haulage) are incorporated by reference into Subchapter A. These regulations address the following issues:

- 1. General requirements.
- 2. Installation of safeguards on haulage and loading equipment.
- 3. Operation of loading and haulage equipment.
- 4. Safeguards at dumping facilities.
 - k. § 209A.12. Miscellaneous.

Six of the regulations in 30 CFR part 77 Subpart R (relating to miscellaneous) are incorporated by reference into Subchapter A. These regulations address the following issues:

- 1. Communications in work areas.
- 2. Emergency communications.
- 3. First aid equipment.
- 4. The use of protective clothing.
- 5. Prohibition against smoking.
- 6. Daily inspection of surface coal mines.
- II. Subchapter B. Surface Noncoal Mines.

This Subchapter applies to "surface mines" as defined in the NSMCRA. *See* § 209A.21 (relating to applicability). Tying this Subchapter's applicability to the definition for surface mine in the NSMCRA ensures that the safety and environmental programs apply to the same facilities.

a. § 209A.22. Definitions.

This section adopts by reference the seven terms defined in 30 CFR § 56.2 (relating to definitions) that are used in the MSHA regulations adopted by reference into Subchapter B. These terms are:

- 1. Competent person.
- 2. Face or bank.
- 3. Flammable.
- 4. Multi purpose dry fire extinguisher.
- 5. Roll protection.
- 6. Scaling.
- 7. Working place.
 - b. § 209A.23. Ground control.

Seven of the regulations in 30 CFR Part 56 Subpart B (relating to ground control) are incorporated by reference into Subchapter B. These regulations address the following issues:

- 1. The definition of travelway.
- 2. The stability of walls, banks and slopes.
- 3. The perimeter of the pit or quarry wall.
- 4. The correction of hazardous conditions.
- 5. The location for performing scaling.
- 6. The examination of ground stability conditions.
- 7. The movement of persons between equipment and highwalls or banks.

c. § 209A.24. Fire prevention and control.

Four of the regulations in 30 CFR Part 56 Subpart C (relating to fire prevention and control) and incorporated by reference into Subchapter B. These regulations address the following issues:

- 1. Restrictions on where smoking or the use of open flames can occur.
- 2. Precautions to be taken when fueling internal combustion engines.
- 3. General requirements for fire fighting equipment.
- 4. Firefighting equipment on self-propelled equipment.
 - d. § 209A.25. Drilling and rotary jet piercing.

Ten of the regulations in 30 CFR Part 56 Subpart F (relating to drilling and rotary jet piercing) are incorporated by reference into Subchapter B. These regulations address the following issues:

- 1. The maintenance of defective equipment.
- 2. The inspection of drilling areas.
- 3. Persons working on a drill mast.
- 4. Working around augers and drill stems.
- 5. Moving the drill.
- 6. Supervision of drill helper by drill operator.
- 7. Tending drills in operation.
- 8. Securing loose objects on masts or drill platforms.
- 9. Restrictions on where persons may be positioned while drilling.
- 10. Restrictions on drilling where there is a possibility of intersecting a hole containing explosives.
 - e. § 209A.26. Loading, hauling and dumping.

Seventeen of the regulations in 30 CFR Part 56 Subpart H (relating to loading, hauling and dumping) are incorporated by reference into Subchapter B. These regulations address the following issues:

- 1. Definitions of terms specific to Subpart H and that are used in regulations incorporated by reference into this section.
 - 2. Traffic control.
 - 3. Controlling mobile equipment.
 - 4. Loading and hauling large rocks.
 - 5. The design and construction of berms and guardrails.
 - 6. Dumpsite restraints.

- 7. The construction of ramps and dumping facilities.
- 8. Unstable ground at dumpsites.
- 9. Using spotters to direct trucks at dumpsites.
- 10. Devices for warning drivers of mobile equipment of hazards due to restricted clearances.
- 11. Safeguards for persons working around draw holes.
- 12. The maintenance of roadways.
- 13. The shaping of stockpiles and muck pile faces to prevent hazards.
- 14. Controlling dust to prevent hazardous conditions due to low visibility.
- 15. Notifying the operator of self-propelled equipment that someone is either getting on or off that equipment.
- 16. Traveling beneath suspended loads.
- 17. Persons getting on or off moving equipment.
 - f. § 209A.27. Electricity.

Three of the regulations in 30 CFR Part 56 Subpart K (relating to Electricity) are incorporated by reference into Subpart B. These regulations address the following issues:

- 1. Ensuring that power conductors will not be damaged if they are run over by mobile equipment.
- 2. Measures to be taken to ensure that electrical equipment is de-energized and remains de-energized while being worked on.
- 3. Precautions to be taken while moving equipment near high-voltage power lines.
 - g. § 209A.28. Machinery and equipment.

Seventeen of the regulations in 30 CFR Part 56 Subpart M (relating to Machinery and equipment) are incorporated by reference into Subchapter B. These regulations address the following issues:

- 1. Definitions of terms that are specific to Subpart M and that are used in regulations adopted by reference into this section.
- 2. Examining for, correcting and recording safety defects in machinery and equipment.
- 3. The maintenance of operator's stations, including windows, on self-propelled mobile equipment.
- 4. Procedures to be followed when repairing or maintaining machinery or equipment.
- 5. Falling object protection structures on self-propelled mobile equipment.
- 6. The use of guards to protect persons from moving machine parts.
- 7. The construction and maintenance of guards.
- 8. Using roll over protective structures and seat belts on certain types of equipment.

- 9. Seat belts for haulage trucks.
- 10. Horns and backup alarms.
- 11. Sounding an audible warning before starting equipment.
- 12. The safe lubrication of machinery.
- 13. The proper use of machinery, equipment and tools.
- 14. Immobilizing the moving parts on mobile equipment.
- 15. Safeguards for unattended parked mobile equipment.
- 16. Restrictions on moving dippers, buckets, loading booms, or suspended loads over operator's stations on self-propelled mobile equipment.
- 17. Securing raised equipment when someone is working near it.
 - h. § 209A.29. Personal protection.

Eight of the regulations in 30 CFR Part 56 Subpart N (relating to personal protection) are incorporated by reference into Subchapter B. These regulations address the following issues:

- 1. First aid materials.
- 2. Hard hats.
- 3. Protective footwear.
- 4. Eye protection.
- 5. The use of safety belts and lines.
- 6. Protective equipment and clothing for hazards and irritants.
- 7. Protective equipment or clothing for welding, cutting, or working with molten metal.
- 8. Life jackets and belts.
 - i. § 209A.30. Materials storage and handling.

Three of the regulations in 30 CFR Part 56 Subpart O (relating to materials storage and handling) are incorporated by reference into Subchapter B. These regulations address the following issues:

- 1. Taglines, hitches and slings.
- 2. Keeping persons clear of suspended loads.
- 3. Clearing the drop area before dropping materials.
 - j. § 209A.31. Illumination.

The requirement to illuminate surface working areas found in 30 CFR § 56.17001 (relating to illumination of surface work areas) is incorporated by reference into Subchapter B.

k. § 209A.32. Safety Programs.

Three of the regulations in 30 CFR Part 56 Subpart Q (relating to safety programs) are incorporated by reference into Subchapter B. These regulations address the following issues:

- 1. Examination of working places.
- 2. Provision of an emergency communication system.
- 3. Prohibitions on working alone.
 - 1. § 209A.33. Miscellaneous provisions.

Two of the regulations in 30 CFR Part 56 Subpart S (relating to Miscellaneous provisions) are incorporated by reference into this Subchapter. These regulations address the following issues:

- 1. Housekeeping requirements.
- 2. The use of barricades and warning signs to protect persons from hazards that are not immediately obvious.

III. Subchapter C Miscellaneous Provisions

The regulations in this subchapter apply to both surface coal mining activities as defined in the SMCRA and surface mines as defined in the NSMCRA. (*See* § 209A.41) (relating to applicability).

a. § 209A.42. Accidents

§ 209A.42 (relating to accident reporting) addresses accident-reporting requirements. The types of events constituting an accident are defined in subsection (a). These definitions are taken from 30 CFR § 50.1 (relating to definitions). Subsection (b) requires the operator to notify the Department within one hour of the occurrence of an accident. Finally, subsection (c) requires the operator to submit to the Department a copy of the accident reports submitted to MSHA.

b. § 209A.43. Alternative standards.

§ 209A.43 (relating to alternative standards) establishes the mechanism by which the Department adopts a mine specific modification of the MSHA standards that have been incorporated by reference into this Chapter. For modifications approved when these regulations become effective, the operator must notify the Department of the MSHA approval. For modifications requested after the effective date of these regulations, the operator must:

- 1. Give the Department a copy of the Petition and all supporting materials when they are submitted to MSHA.
- 2. Notify the Department of the MSHA approval.

c. § 209A.44. Access to records.

§ 209A.44. (relating to access to records), gives the Department access to review and copy all documents required by MSHA.

F. Benefits, Costs and Compliance

Executive Order 1996-1 requires a cost/benefit analysis of the proposed regulation.

Compliance Costs

The proposed changes will impose no additional compliance costs on the regulated community. Pennsylvania surface mines must already comply with these federal safety regulations. In fact, the implementation of these regulations should result in cost savings in that accidents will be prevented.

Compliance Assistance Plan

The Department will explain to each job foreman the changes in Pennsylvania regulations.

Paperwork Requirements

These regulations establish two paperwork requirements. First, there is a requirement to submit to the Department copies of the documentation in support of a request to MSHA for a modification of a health and safety standard that has been incorporated by reference into these regulations. Second, there is the requirement to submit to the Department the same accident reports submitted to MSHA. The only cost to the operator is the cost of copying and mailing these documents to the Department.

G. Pollution Prevention

The rulemaking will not modify the pollution prevention approach by the regulated community and maintains the multi-media pollution prevention approach of existing requirements in 25 Pa. Code.

H. Sunset Review

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

I. Regulatory Review

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

Under Section 5(g) of the Regulatory Review Act, if IRRC has objections to any portion of the proposed amendments, it will notify the Department within 10 days of the close of the Committees' review period. The notification shall specify the regulatory review criteria that have not been met by that portion. The Regulatory Review Act specifies detailed procedures for review by the Department, the Governor and the General Assembly before final publication of the final-form regulations.

J. Public Comments

KATHLEEN A. MCGINTY Chairperson Environmental Quality Board