# **RULES AND REGULATIONS**

# Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD
[ 25 PA. CODE CHS. 77, 87—89 AND 210 ]
Mine Opening Blasting

The Environmental Quality Board (Board) amends Chapters 77, 87-89 and 210 to read as set forth in Annex A. This final-form rulemaking addresses a number of issues regarding blasting at a mine site. It clarifies that the use of explosives in connection with the construction of a mine opening for an underground mine is a surface mining activity subject to the applicable requirements in Chapters 77, 87 or 88 (relating to noncoal mining; surface mining of coal; and anthracite coal) and that the person conducting the blasting activity shall possess a blaster's license. This final-form rulemaking increases the flexibility in the scheduling of blasting for constructing openings for coal and industrial mineral underground mines, as well as, the limits for the resulting ground vibrations and airblasts. Also, the requirements for protective measures to be taken when surface coal mine blasting is in proximity to a public highway or an entrance to a mine have been made more flexible. Finally, a category for mine opening blasting is being added to the classifications of blaster's licenses.

This final-form rulemaking was adopted by the Board at its meeting of April 15, 2008.

#### A. Effective Date

These amendments are effective upon publication in the *Pennsylvania Bulletin*.

#### B. Contact Persons

For further information, contact Joseph Pizarchik, Director, Bureau of Mining and Reclamation, P. O. Box 8461, Rachel Carson State Office Building, Harrisburg, PA 17105-8461, (717) 787-5015; or Marc A. Roda, Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060.

#### C. Statutory Authority

This final-form rulemaking is promulgated under the authority in section 4.2 of the Surface Mining Conservation and Reclamation Act (SMCRA) (52 P. S. § 1396.4b); section 11 of the Noncoal Surface Mining Conservation and Reclamation Act (NCSMCRA) (52 P. S. § 3311); and sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P. S. §§ 510-17 and 510-20).

#### D. Background and Purpose

This final-form rulemaking amends the regulations regarding the use of explosives in connection with the development of an opening for an underground mine to ensure that these regulations protect both the public and miners. This final-form rulemaking clarifies that the use of explosives in connection with the construction of a mine opening for an underground coal or noncoal mine is a surface mining activity or surface mining subject to the applicable requirements in Chapters 77, 87 or 88 and that the person conducting the blasting activity shall possess a blaster's license. A category for mine opening blasting is being added to the classifications of blaster's

licenses. In addition, the scheduling requirements applicable to the use of explosives for constructing openings for coal and industrial mineral underground mines are made more flexible. The requirements for protective measures to be taken when surface coal mine blasting is in proximity to a public highway or an entrance to a mine are also made more flexible.

The SMCRA and the NCSMCRA broadly define "surface mining activities" and "surface mining" respectively, to include activities conducted on the surface that are incidental to the establishment or operation of an underground mine, including, among other things, the construction of the mine opening from the surface to the coal seam or mineral strata being or to be mined. Mine opening construction occurs in proximity to inhabited areas and the Department receives complaints about the affects of the related blasting activity during the construction of the entire opening (to the coal seam or mineral being mined). Applying surface mining blasting regulations to the construction of the entire mine opening is necessary because it limits airblast and ground vibration and prohibits the flyrock that potentially could result from the blasting. Airblast and ground vibration is limited to prevent damage of nearby structures and to prevent blasting that would be a nuisance. Flyrock is prohibited to prevent property damage and to prevent personal injury or death.

Even though the explosives regulations for surface anthracite and bituminous mines require all blasts to be conducted by a blaster licensed under Chapter 210 (relating to licensing of blasters), there has been some confusion as to whether Chapter 210 applies to entry blasting. See §§ 87.134(c), 88.124(c) and 210.12 (relating to use of explosives: general requirements; blasting: general requirements; and to scope). This confusion is related to the fact that blasting for underground mines is also authorized by the Pennsylvania Anthracite Coal Mine Act and the Pennsylvania Bituminous Coal Mine Act (52 P. S. §§ 70-101—70-133 and 701-101—701-127) and persons authorized by the Pennsylvania Anthracite Coal Mine Act and the Pennsylvania Bituminous Coal Mine Act are exempt from Chapter 210. It is the Department's position that the requirements of §§ 87.124(d) and 88.134(c), requiring that all surface blasting activities be conducted by a competent blaster licensed in compliance with Chapter 210, apply. Based on the unique issues regarding mine opening blasting, it is necessary to create a separate license classification for this activity that takes into consideration that mine opening blasters are conducting blasting operations below the surface that result in the need to limit that blasting's effect on people and property on the surface.

The requirement that currently limits blasting to day-light hours, when applied to all mine opening blasting, poses a significant risk to mine workers without significantly protecting the rest of the public. A risk of instability in a mine opening under construction exists if that opening passes through sandstone or shale strata because these rocks deteriorate when exposed to air and water. If this situation exists, blasting on an as-needed basis is necessary to enable the expeditious grouting of the mine opening with a ring of cement, sealing off the exposure to air and water. Public protection is provided by applying limits to airblast and ground vibration and prohibiting flyrock.

Barricading and guarding a highway, as required by §§ 87.127 and 88.135 (relating to use of explosives: surface blasting requirements; and blasting: surface blasting requirements) is not always the best method for protecting the public from mine blasting near that highway. In many cases, careful design of blasts protects the public more than barricading roads that are heavily traveled, subjecting the traveling public to the threat of accidents resulting from blocking of the road.

The Mining and Reclamation Advisory Board (MRAB) considered the proposed rulemaking package at the August 15, 2005, October 27, 2005, and January 5, 2006, meetings. While there was general agreement on many sections, the MRAB deadlocked on whether certain changes should be made to affirm mine opening blasting is a surface mining activity. MRAB directed the Department to proceed to the Board and to note the MRAB's position in the proposed rulemaking package.

The notice of proposed rulemaking for the mine opening blasting amendments was published at 36 Pa.B. 5608 (September 2, 2006). There was a 30-day comment period. The Pennsylvania Coal Association (PCA) and the Independent Regulatory Review Commission (IRRC) submitted comments. The Department has considered these comments and has prepared a comment and response document. The comment and response document is available on the Department's web site and from the contact person listed in Section B of this order.

The MRAB considered this final rulemaking package at the January 25, 2007, meeting. The Department's regulatory authority over the blasting associated with the construction of the entire shaft was discussed. The discussion led to a motion that the MRAB not endorse the regulations. The motion not to endorse the regulations carried 4-3 because members of the MRAB hold that mine opening blasting down to the coal seam is not surface mining activity. Although the Department appreciated the advice of the MRAB, the Department moved forward to final-form rulemaking. The Department recommended proceeding to final-form rulemaking because the SMCRA statutory definition of "surface mining activity" includes "strip, auger mining, dredging, quarrying and leaching, and all surface activity connected with surface or underground mining, including, but not limited to, exploration, site preparation, entry, tunnel, drift, slope, shaft and borehole drilling and construction . . ."

E. Summary of Comments and Responses on the Proposed Rulemaking and Changes Made in the Final-Form Rulemaking

The Board approved publication of the proposed rule-making at its May 17, 2006, meeting, and the notice of proposed rulemaking was published at 36 Pa.B. 5608. The following is a summary of the major comments that the Board received along with the responses:

Statutory authority

The commentators questioned the Department's statutory authority to regulate all blasting in connection with the construction of an underground coal mine opening as surface coal mining blasting.

Both the SMCRA and the NCSMCRA apply to the construction of an opening to a mine from the surface to the coal seam or mineral deposit to be mined. The definition of "surface mining activity" in SMCRA and the definition of "surface mining" in NCSMCRA clearly include the construction of mine openings within the activities covered by these statutes.

Executive Order 1996-1

One commentator contended that this rulemaking establishes regulations that exceed federal standards without complying with Executive Order 1996-1.

The regulation is consistent with Executive Order 1996-1. The Department has received complaints about mine opening blasting. The compelling Pennsylvania interest is that blasting is an ultra-hazardous activity and unregulated blasting presents a risk of injury or death and property damage from flyrock; can be a nuisance to nearby inhabitants, especially if blasting occurs at night; and, can generate ground vibration and airblasts that damage nearby structures.

Blasts

One commentator is concerned that the term "blast" as used in §§ 77.564(b), 87.127(a) and 88.135(a) is vague and should be defined.

The Department agrees. The term "blast" has been defined as "a detonation of explosives." In addition, the term blasting has been defined as "the detonation of explosives."

Requests for unscheduled mine opening blasting

A commentator inquired as to the criteria and process to be used by the Department to determine whether unscheduled blasting is necessary to maintain the mine opening's stability.

Blasting activity in connection with the construction of a mine opening is reviewed and approved as part of the mining permit. The vehicle for this review and approval is the blast plan. See for example, § 87.64 (relating to blasting plan). It is the operator's obligation to establish that blasting after sunset is necessary to maintain the mine opening's stability. A risk of instability in a mine opening under construction exists if that opening passes through sandstone or shale strata because these rocks deteriorate when exposed to air and water. If this situation exists, blasting on an as needed basis is necessary to enable the expeditious grouting of the mine opening with a ring of cement, sealing off the exposure to air and water.

Consent to alternative ground vibration and airblast limitations

A commentator recommended that the regulations indicate what information, including the blaster's strict liability, the building owner and lessee must be given before giving written consent to less stringent vibration limits.

An additional regulation is unnecessary. The regulations provide vibration limits that, if adhered to, ensure that damage will not occur to buildings or other structures. See for example, § 77.564(f) and (i). The written consent of a building owner is a civil agreement between the permittee and the owner of the building, and if applicable, the lessee. Each party is responsible for ensuring that their interests are protected. The Department cannot evaluate the appropriateness of a request for alternative vibration limits unless the consent is clear and specific.

A commentator recommended developing a standard consent form for waivers of peak particle velocity and airblast limits and asked if a homeowner's waiver of regulatory limits negates their insurance coverage.

It is not appropriate to use the regulations to develop forms. The Department is not in a position and does not have the authority to obtain and then analyze a homeowner's insurance policy to determine whether a civil agreement between a mine operator and a homeowner will affect the homeowner's insurance coverage.

Ground vibration and airblast limits

A commentator observed that the use of the term "vibration limits" was unclear.

The term has been changed to "ground vibration and airblast limits."

Airblast

A commentator questioned why it is no longer necessary to use excessive noise as a basis for placing further restrictions on blasting.

The term "noise" is a misnomer. The effect of blasting is an increase of air pressure above ambient levels which is called "airblast." Noise relates to human hearing. Airblast levels at low frequencies (below 20 Hz), also referred to as concussions, are not audible by persons but may adversely affect buildings or other structures. To avoid confusion and to ensure consistency, the terms noise and sound pressure have been either deleted or replaced with the term "airblast."

#### Alternative measures

A commentator asked if local governments or residents will be given notice and the opportunity to participate in the Department's decision to approve alternate protective measures.

Local governments and residents will have the same opportunity to participate in the decision on a request for alternative measures as they are given for the other aspects of the permit application.

#### Blasting Reports

A change has been made to § 88.137(4) to specify that blast records must include the identity of the dwelling or other structure closest to the blasting as well as the distance and direction. The preamble to the notice of proposed rulemaking discussed making this change to §§ 87.129(4) and 88.137(4). However, the proposed amendment to § 88.137(4) was not in the Annex A approved by the Board and published as part of the notice of proposed rulemaking. This oversight has been corrected and the complete language has been included in this final-form rulemaking.

#### F. Benefits, Cost, and Compliance

#### Costs

This final-form rulemaking will not increase costs. The existing regulations require all blasting in connection with the construction of a mine opening, from the surface to the coal seam or mineral to be mined, to comply with the applicable surface mining explosives regulations. The final-form rulemaking amends the surface mining explosives regulations to eliminate any ambiguity that the regulations apply to mine opening blasting and to provide greater flexibility to enhance the safety of the workers constructing the mine opening and for the safety of the traveling public when blasting is in proximity to a public road.

#### Compliance assistance plan

Compliance assistance will be provided by the surface mine inspectors and explosives inspectors.

#### Paperwork requirements

This final-form rulemaking has no effect on existing paperwork requirements.

#### G. Sunset Review

This final-form rulemaking will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the intended goals.

#### H. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on August 17, 2006, the Department submitted a copy of the notice of proposed rulemaking, published at 36 Pa.B. 5608, to the IRRC and to the Chairpersons of the Senate and House Environmental Resources and Energy Committees (Committees).

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing these final-form regulations, the Department has considered all comments from IRRC, the Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act, on June 18, 2008, these final-form regulations were deemed approved by the Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on June 19, 2008, and approved the final-form regulations.

#### I. Findings

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, and all comments were considered.
- (3) This final-form rulemaking does not enlarge the purpose of the proposal published at 36 Pa.B. 5608.
- (4) This final-form rulemaking is necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

#### J. Order

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department, 25 Pa. Code Chapters 77, 87—89 and 210, are amended by amending §§ 77.1, 77.564, 87.1, 87.124, 87.126, 87.127, 87.129, 88.1, 88.135, 88.137, 88.493, 89.5, 89.62, 210.11, 210.12 and 210.17 to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.
- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.
- (c) The Chairperson of the Board shall submit this order and Annex A to IRRC and the Committees as required by the Regulatory Review Act.
- (d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.

(e) This order shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

JOSEPH R. POWERS, Acting Chairperson

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 38 Pa.B. 3726 (July 5, 2008).)

**Fiscal Note:** Fiscal Note 7-400 remains valid for the final adoption of the subject regulations.

#### Annex A

# TITLE 25. ENVIRONMENTAL PROTECTION PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

## Subpart C. PROTECTION OF NATURAL RESOURCES

### ARTICLE I. LAND RESOURCES CHAPTER 77. NONCOAL MINING Subchapter A. GENERAL PROVISIONS

#### § 77.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

\* \* \* \* \*

Blast—A detonation of explosives.

Blasting—The detonation of explosives.

\* \* \* \* \*

Mine opening blasting—Blasting conducted for the purpose of constructing a shaft, slope, drift or tunnel mine opening for an underground mine, either operating or under development, from the surface down to the point where the mine opening connects with the mineral strata to be or being extracted.

# Subchapter I. ENVIRONMENTAL PROTECTION

# PERFORMANCE STANDARDS USE OF EXPLOSIVES

§ 77.564. Surface blasting requirements.

\* \* \* \*

- (b) Blasting shall be conducted between sunrise and sunset, at times announced in the blasting schedule, except that mine opening blasting conducted after the second blast, for that mine opening, may be conducted at any time of the day or night as necessary to maintain stability of the mine opening to protect the health and safety of mine workers. For mine opening blasting conducted after the second blast, for that mine opening, the Department may approve ground or airblast vibration limits at a dwelling, public building, school, church or commercial or institutional structure, that are less stringent than those specified in subsections (f) and (i) if consented to, in writing, by the affected building owner and lessee, if leased to another party.
- (c) The Department may specify more restrictive time periods, airblast or ground vibration limits, based on public requests or other relevant information, according to the need to adequately protect the public from the adverse affects of ground vibration, airblast or safety hazards.

\* \* \* \* \*

- (f) Airblasts shall be controlled so that they do not exceed 133 dBL at a dwelling, public building, school, chuch or commercial or institutional structure, unless the structure is owned by the person who conducts the surface mining activities and is not leased to another person. The lessee may sign a waiver relieving the operator from meeting the airblast limitations of this subsection.
- (1) *Exceptions.* The Department may specify lower maximum allowable airblast levels than those in this subsection for use in the vicinity of a specific blasting operation, if necessary.
- (2) *Monitoring*. The operator shall conduct periodic monitoring to ensure compliance with the airblast standards. The Department may require an airblast measurement of a blast, and may specify the location of the requirements.

### CHAPTER 87. SURFACE MINING OF COAL

#### Subchapter A. GENERAL PROVISIONS

#### § 87.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings unless the context clearly indicates otherwise:

\* \* \* \* \*

Blast—A detonation of explosives.

Blasting-The detonation of explosives

\* \* \* \* \*

Mine opening blasting—Blasting conducted for the purpose of constructing a shaft, slope, drift or tunnel mine opening for an underground mine, either operating or under development, from the surface down to the point where the mine opening connects with the coal seam to be or being extracted.

# Subchapter E. SURFACE COAL MINES: MINIMUM ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS

#### § 87.124. Use of explosives: general requirements.

- (a) A person who conducts surface mining activities shall comply with this chapter and applicable State and Federal laws in the use of explosives.
- (b) Blasts that use more than 5 pounds of explosive or blasting agents shall be conducted according to the schedule required under § 87.126 (relating to use of explosives: public notice of blasting schedule).
- (c) Blasting operations shall be conducted by or under the supervision of a competent blaster licensed and operating in compliance with Chapter 210 (relating to blasters' licenses).
- (d) Blasting operations shall be conducted in compliance with Chapter 211 (relating to storage, handling and use of explosives).
- (e) A person responsible for blasting operations at a blasting site shall be familiar with the blasting plan and site-specific performance standards.

## § 87.126. Use of explosives: public notice of blasting schedule.

- (a) Blasting schedule publication.
- (1) Each person who conducts surface mining activities shall publish a blasting schedule in a newspaper of general circulation in the locality of the proposed site, at least 10 days, but not more than 30 days, before beginning a blasting program in which blasts that use more than 5 pounds of explosives or blasting agents are detonated.
- (2) Copies of the schedule shall be distributed by mail to local governments and public utilities and by mail or delivered to each resident within 1/2 mile of the blasting area. Copies sent to residents shall be accompanied by information advising the owner or resident how to request a preblasting survey.
- (3) The person who conducts the surface mining activities shall republish and redistribute the schedule by mail at least every 12 months.
  - (b) Blasting schedule contents.
- (1) A blasting schedule may not be so general as to cover the entire permit area or all working hours, but must identify as accurately as possible the location of the blasting sites and the time periods when blasting will occur
- (2) The blasting schedule must contain at a minimum the following:
- (i) Identification of the specific areas in which blasting will take place. Each specific blasting area described must be reasonably compact and not larger than 300 acres (121.4 hectares).
- (ii) Dates and time periods when explosives are to be detonated.
- (iii) Methods to be used to control access to the blasting area.
- (iv) Types of audible warnings and all-clear signals to be used before and after blasting.
- (v) A description of possible emergency situations that might prevent blasting at times announced in the blasting schedule, such as rain, lightning, other atmospheric conditions or operator or public safety which may require unscheduled detonation.
  - (c) Public notice of changes to blasting schedules.
- (1) The person who conducts the surface mining activities shall prepare a revised blasting schedule before blasting in areas or at times not in a previous schedule.
- (2) The blasting schedule shall be revised, published and distributed in accordance with this section. Advice on requesting a preblast survey need not be provided to those parties advised in the original distribution under subsection (a)(2).

# § 87.127. Use of explosives: surface blasting requirements.

(a) Blasting shall be conducted between sunrise and sunset, at times announced in the blasting schedule, except that mine opening blasting conducted after the second blast, for that mine opening, may be conducted at any time of day or night as necessary to maintain stability of the mine opening to protect the health and safety of mineworkers. For mine opening blasting conducted after the second blast, for that mine opening, the Department may approve ground vibration and airblast limits at a dwelling, public building, school, church or

- commercial or institutional structure, that are less stringent than those specified in subsection (e) or (m) if consented to, in writing, by the structure owner and lessee, if leased to another party.
- (b) The Department may specify more restrictive time periods, airblast or ground vibration limits, based on public requests or other relevant information, according to the need to adequately protect the public from the adverse affects of ground vibration, airblast or safety hazards.

\* \* \* \* \*

- (e) Airblast shall be controlled so that it does not exceed the level specified in this subsection at a dwelling, public building, school, church or commercial or institutional structure, unless the structure is located on the permit area when the structure owner and lessee, if leased to another party, have each signed a waiver relieving the operator from meeting the airblast limitations of this subsection.
  - (1) The maximum allowable airblast level is 133 dBL.

\* \* \* \* \*

- (f) Requirements for blasting are as follows:
- (1) Public highways and entrances to the operation shall be barricaded and guarded by the operator if the highways and entrances to the operations are located within 800 feet of a point where a blast is about to be fired. The operator may use an alternative measure to this requirement if the operator demonstrates, to the Department's satisfaction, that the alternative measure is at least as effective at protecting persons and property from the adverse affects of a blast. Alternative measures are measures such as:
- (i) Slowing or stopping traffic in coordination with appropriate State or local authorities, including local police.
  - (ii) Using mats to suppress fly rock.
- (iii) Designing the blast to prevent damage or injury to persons and property located on the public highways or at the operation's entrances by using design elements such as:
- (A) Orienting the blast so that the direction of relief is away from public highways or operation entrances.
  - (B) Adjusting blast design parameters including:
  - (I) The diameter of holes.
  - (II) The number of rows.
  - (III) The number of holes.
  - (IV) The amount and type of explosive.
  - (V) The burden and spacing.
  - (VI) The amount and type of stemming.
  - (VII) The powder factor.

\* \* \* \* \*

(j) When seismographs are not used to monitor peak particle velocity, the maximum weight of explosives to be detonated within an 8 millisecond period may be determined by the formula  $W = (D/Ds)^2$  where W equals the maximum weight of explosives, in pounds, that can be detonated in any 8 millisecond period or greater, D equals the distance, in feet, from the blast to the nearest dwelling, school, church, commercial or institutional building and Ds equals the scaled distance factor. The development of a modified scaled-distance factor may be

authorized by the Department on receipt of a written request by the operator, supported by seismographic records of blasting at the minesite. The modified scaled-distance factor shall be determined so that the particle velocity of the predicted ground vibration will not exceed the prescribed maximum allowable peak particle velocity of subsection (m) at a 95% confidence level.

\* \* \* \* \*

- (l) The Department may require a seismograph record of blasts and may specify the location at which the measurements are taken.
- (m) The maximum ground vibration may not exceed the following limits at the location of a dwelling, public building, school, church or community or institutional building:

Distance (D), from the blasting site, in feet	Maximum allowable peak particle velocity (Vmax) for ground vibration, in inches/second <sup>1</sup>	Scaled-distance factor to be applied without seismic monitoring (Ds) <sup>2</sup>
0 to 300	1.25	50
301 to 5,000	1.00	55
5,001 and beyond	.75	65

<sup>1</sup>Ground vibration shall be measured as the particle velocity. Particle velocity shall be recorded in three mutually perpendicular directions. The maximum allowable peak particle velocity shall apply to each of the three measurements.

<sup>2</sup>Applicable to the scaled-distance equation of subsection (j).

- (n) The Department will not permit blasting to be conducted until:
- (1) Blasting plans, under § 87.64 (relating to blasting plan), are approved by the Department and the approved blasting plan is returned to the operator.
- (2) Notification of completion of requested preblasting surveys, under § 87.125 (relating to use of explosives: preblasting survey), is received by the Department.
- (3) Copy of the proof of publication of each blasting schedule, under § 87.126 (relating to use of explosives; public notice of blasting schedule), is received by the Department.
- (o) An operator may use Figure 1, the blast level chart, to determine the maximum allowable ground vibration. If Figure 1 is used, the operator shall provide a seismograph record including both the particle velocity time-history (wave form) and the particle velocity and vibration frequency levels for each blast.

\* \* \* \* \*

- (1) The vibration frequency shall be displayed and analyzed over the frequency range of 1 Hz through  $100\,$  Hz.
- (2) The permittee shall obtain Department approval of the analytical method used to determine the predominant frequency before applying this alternative criterion.

# § 87.129. Use of explosives: records of blasting operations.

A record of each blast shall be retained for at least 3 years and shall be available for inspection by the Department and the public on request. Seismographic reports, if applicable, must be made a part of that record. The record must contain the following data:

- (1) The name of the operator conducting the blast.
- (2) The location, date and time of blast.
- (3) The name, signature and license number of blaster-in-charge.
- (4) The identification of and the direction and distance, in feet, to the nearest dwelling, public building, school, church, commercial or institutional building or other structure.
- (5) Weather conditions, including temperatures, wind direction and approximate velocity.
  - (6) The type of material blasted.
  - (7) The number of holes, burden and spacing.
  - (8) The diameter and depth of holes.
  - (9) The types of explosives used.
  - (10) The total weight of explosives used.
- (11) The maximum weight of explosives detonated per delay interval.
- (12) The maximum number of holes detonated per delay interval.
  - (13) The initiation system.
  - (14) The type and length of stemming.
  - (15) The mats or other protections used.
- (16) The type of delay detonator and delay periods used.
- (17) A sketch of the blast pattern, including number of holes, burden, spacing, decks and delay pattern.
  - (18) The number of persons in the blasting crew.
- (19) Seismographic and airblast records, when required, including the type of instrument, sensitivity and calibration signal of the gain setting or certification of annual calibration and the following:
- (i) The seismographic or airblast level, or both, reading, including the exact location of seismograph and its distance from the blast.
- (ii) The name of the person taking the seismograph reading.
- (iii) The name of person and firm analyzing the seismographic record.
- (20) The reasons and conditions for each unscheduled blast.

#### CHAPTER 88. ANTHRACITE COAL Subchapter A. GENERAL PROVISIONS PRELIMINARY PROVISIONS

#### § 88.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

\* \* \* \* \*

*Blast*—A detonation of explosives.

Blasting—The detontation of explosives.

\* \* \* \* \*

Mine opening blasting—Blasting conducted for the purpose of constructing a shaft, slope, drift or tunnel mine opening for an underground mine, either operating or under development from the surface down to the point where the mine opening connects with the coal seam to be or being extracted.

\* \* \* \* \*

# Subchapter B. SURFACE ANTHRACITE COAL MINES: MINIMUM ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS

#### § 88.135. Blasting: surface blasting requirements.

- (a) Blasting shall be conducted between sunrise and sunset, except that mine opening blasting conducted after the second blast for that mine opening may be conducted at any time of day or night as necessary to maintain stability of the mine opening to protect the health and safety of mine workers. For mine opening blasting conducted after the second blast, for that mine opening, the Department may approve ground vibration and airblast limits at a dwelling, public building, school, church or commercial or institutional structure, that are less stringent than those specified in subsection (h) if consented to, in writing, by the structure owner and lessee, if leased to another party.
- (b) The Department may specify more restrictive time periods, airblast or ground vibration limits, based on public requests or other relevant information, according to the need to adequately protect the public from the adverse affects of ground vibration, airblast or safety hazards.

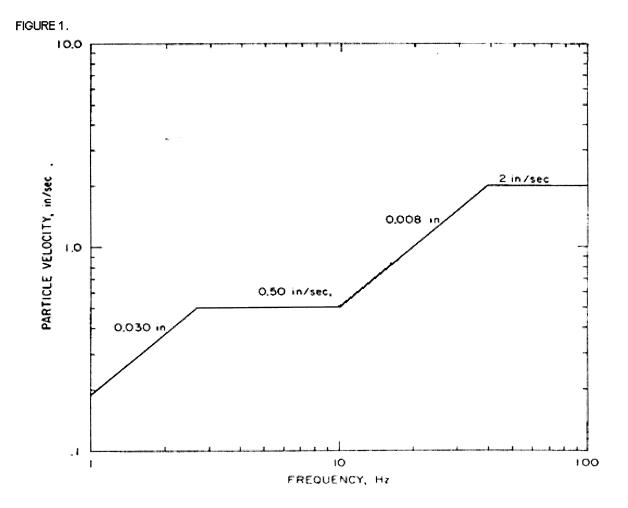
\* \* \* \* \*

- (f) Blasting operations must meet the following requirements:
- (1) Public highways and entrances to the operation shall be barricaded and guarded by the operator if the highways and entrances to the operations are located within 800 feet of a point where a blast is about to be fired. The operator may use an alternative measure to this requirement if the operator demonstrates, to the Department's satisfaction, that the alternative measure is at least as effective at protecting persons and property from the adverse affects of a blast. Alternative measures are measures such as:

- (i) Slowing or stopping traffic in coordination with appropriate State or local authorities, including local police.
  - (ii) Using mats to suppress fly rock.
- (iii) Designing the blast to prevent damage or injury to persons and property located on the public highways or at the operation's entrances by using design elements such as:
- (A) Orienting the blast so that the direction of relief is away from public highways or operation entrances.
  - (B) Adjusting blast design parameters including:
  - (I) The diameter of holes.
  - (II) The number of rows.
  - (III) The number of holes.
  - (IV) The amount and type of explosive.
  - (V) The burden and spacing.
  - (VI) The amount and type of stemming.
  - (VII) The powder factor.

\* \* \* \* \*

(h) In all blasting operations, the blasts shall be designed and conducted in a manner that achieves either a scaled distance of 90 or meets the maximum allowable peak particle velocity as indicated by Figure 1 at the location of any dwelling, public building, school, church or commercial or institutional building. Peak particle velocities shall be recorded in three mutually perpendicular directions—longitudinal, transverse and vertical. The maximum peak particle velocity shall be the largest of any of three measurements. The Department may reduce the maximum peak particle velocity allowed, if it determines that a lower standard is required because of density of population or land use, age or type of structure, geology or hydrology of the area, frequency of blasts or other factors. The airblast level may not exceed 133 dBL.



- (i) The maximum peak particle velocity and airblast limitations of this section do not apply at the following locations:
- (1) At structures owned by the person conducting the mining activity, and not leased to another party.
- (2) At structures owned by the person conducting the mining activity, and leased to another party, if a written waiver by the lessee is submitted to the Department prior to the blasting.
- (j) Where seismographs are not used to monitor peak velocity, the maximum weight of explosives to be detonated within any 8 millisecond period may be determined by formula  $W=(D/50^2)$  where W= the maximum weight of explosives, in pounds, that can be detonated in any 8 millisecond period, or greater and D= the distance, in feet, from the blast to the nearest dwelling, school, church or commercial institutional building.
- (k) Where a seismograph is used to monitor the peak particle velocity a seismograph record shall be obtained for each blast.
- (l) The Department may require a seismograph record of any blasts and may specify the location at which the measurements are taken.

## § 88.137. Use of explosives: records of blasting operations.

A record of each blast shall be retained for at least 3 years and shall be available for inspection by the Department and the public on request. Seismographic reports, if applicable, must be made a part of that record. The record must contain the following data:

- (1) The name of the operator conducting the blast.
- (2) The location, date and time of blast.
- (3) The name, signature and license number of blaster-in-charge.
- (4) The identification of and the direction and distance, in feet, to the nearest dwelling, school, church or commercial or institutional building if it is one of the following:
  - (i) Not located in the permit area.
- (ii) Not owned nor leased by the person who conducts the surface mining activities.
- (5) Weather conditions, including temperatures, wind direction and approximate velocity.
  - (6) The type of material blasted.
  - (7) The number of holes, burdens and spacing.
  - (8) The diameter and depth of holes.
  - (9) The types of explosives used.

- (10) The scaled distance.
- (11) The total weight of explosives used.
- (12) The maximum weight of explosives detonated per delay interval.
- (13) The maximum number of holes detonated per delay interval.
  - (14) The initiation system.
  - (15) The type and length of stemming.
  - (16) The mats or other protections used.
- (17) The type of delay detonator and delay periods used.
  - (18) The arrangement of the delay pattern.
- (19) The seismograph records, when required, including the calibration signal of the gain setting and the following:
- (i) A seismograph reading, including exact location of seismograph and its distance from the blast.
- (ii) The name of the person taking the seismograph reading.
- (iii) The name of the person and firm analyzing the seismographic record.

## Subchapter F. ANTHRACITE UNDERGROUND MINES

### § 88.493. Minimum environmental protection performance standards.

A person who conducts underground mining activities shall comply with the performance standards and design requirements of this section. The following performance standards shall be met:

\* \* \* \* \*

- (7) Use of explosives includes:
- (i) A person who conducts surface blasting activities incident to underground mining activities, including, but not limited to, mine opening blasting shall conduct the activities in compliance with §§ 88.45 and 88.134—88.137.
- (ii) A person who conducts underground blasting activities shall comply with this chapter and applicable State and Federal laws and regulations in the use of explosives.

#### CHAPTER 89. UNDERGROUND MINING OF COAL AND COAL PREPARATION FACILITIES

# Subchapter A. EROSION AND SEDIMENTATION CONTROL

#### GENERAL PROVISIONS

#### § 89.5. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

\* \* \* \* \*

Mine opening blasting—Blasting conducted for the purpose of constructing a shaft, slope, drift or tunnel mine opening for an underground mine, either operating or under development, from the surface down to the point where the mine opening connects with the coal seam to be or being extracted.

\* \* \* \* \*

# **Subchapter B. OPERATIONS PERFORMANCE STANDARDS**

#### § 89.62. Use of explosives.

Each person who conducts surface blasting activities incident to underground mining activities, including, but not limited to, mine opening blasting, shall conduct the activities in compliance with Chapter 87 (relating to surface mining of coal).

## ARTICLE IV. OCCUPATIONAL HEALTH AND SAFETY

#### **CHAPTER 210. BLASTERS' LICENSES**

#### § 210.11. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

*Blaster*—A person who is licensed by the Department under this chapter to detonate explosives and supervise blasting activities.

*Blaster learner*—An individual who is learning to be a blaster and who participates in blasting activities under the direct supervision of a blaster.

*Blaster's license*—A license to detonate explosives and supervise blasting activities issued by the Department under this chapter.

Demolition and demolition blasting—The act of wrecking or demolishing a structure with explosives.

Mine opening blasting—Blasting conducted for the purpose of constructing a shaft, slope, drift or tunnel mine opening for an underground mine, either operating or under development, from the surface down to the point where the mine opening connects with the mineral strata to be or being extracted.

Person—A natural person.

#### § 210.12. Scope.

This chapter applies to persons engaging in the detonation of explosives within this Commonwealth. Except for persons engaging in mine opening blasting, this chapter does not apply to persons authorized to detonate explosives or to supervise blasting activities under:

- (1) The Pennsylvania Anthracite Coal Mine Act (52 P. S. §§ 70.101—70.1405).
- (2) The Pennsylvania Bituminous Coal Mine Act (52 P. S. §§ 701-101—701-706).

#### § 210.17. Issuance and renewal of licenses.

- (a) A blaster's license is issued for a specific classification of blasting activities. The classifications will be determined by the Department and may include general blasting (which includes all classifications except demolition, mine opening blasting and underground noncoal mining), trenching and construction, seismic and pole line work, well perforation, surface mining, underground noncoal mining, mine opening blasting, industrial, limited and demolition.
- (b) A person may apply to amend the blaster's license for other classifications by meeting the requirements of § 210.14 (relating to eligibility requirements) and by submitting a complete application.
  - (c) A blaster's license will be issued for 3 years.
- (d) A blaster's license is renewable if the blaster can demonstrate that he has had 8 hours of continuing

education in Department-approved courses related to blasting and safety within the 3 year period.

- (e) The blaster's license may be renewed for a 3-year term by submitting a renewal application to the Department and a check for \$30, payable to the Commonwealth of Pennsylvania.
- (f) A person who intends to be a blaster and whose blaster's license was not renewed within 1 year of its expiration date shall apply for a new license under §§ 210.14—210.16 (relating to eligibility requirements; license application; and examinations).
- (g) A person who conducted demolition blasting under a general blaster's license may conduct demolition blasting after July 14, 2001, by applying for and receiving a demolition blaster's license. The Department may waive the examination required by § 210.14 and the application fee if the blaster demonstrates at least 3 years of experience in demolition blasting. The demonstration shall be in the form of a notarized statement from the blaster's employer that describes the blaster's experience.

[Pa.B. Doc. No. 08-1456. Filed for public inspection August 8, 2008, 9:00 a.m.]

## **ENVIRONMENTAL QUALITY BOARD** [ 25 PA. CODE CH. 93 ]

Stream Redesignations (Big Brook, et al.)

The Environmental Quality Board (Board) by this order amends 25 Pa. Code §§ 93.9b, 93.9f, 93.9g, 93.9n, 93.9o and 93.9r to read as set forth in Annex A.

#### A. Effective Date

These amendments are effective upon publication in the Pennsylvania Bulletin as final-form rulemaking.

#### B. Contact Persons

For further information, contact Richard H. Shertzer, Chief, Division of Water Quality Standards, Bureau of Water Standards and Facility Regulation, 11th Floor, Rachel Carson State Office Building, P. O. Box 8467, 400 Market Street, Harrisburg, PA 17105-8467, (717) 787-9637 or Michelle Moses, Assistant Counsel, Bureau of Regulatory Counsel, 9th Floor, Rachel Carson State Office Building, P. O. Box 8464, Harrisburg, PA 17105-8464, (717) 787-7060. Persons with a disability may use the AT&T Relay Service by calling (800) 654-5984 (TDDusers) or (800) 654-5988 (voice users). This proposal is available electronically through the Department of Environmental Protection (Department) web site www.depweb. state.pa.us.

#### C. Statutory and Regulatory Authority

This final-form rulemaking is being made under the authority of sections 5(b)(1) and 402 of The Clean Streams Law (35 P. S. §§ 691.5(b)(1) and 691.402), which authorizes the Board to develop and adopt rules and regulations to implement the provisions of The Clean Streams Law and section 1920-A of The Administrative Code of 1929 (71 P.S. § 510-20), which grants to the Board the power and duty to formulate, adopt, and promulgate rules and regulations for the proper performance of the work of the Department. In addition, section 303 of the Federal Clean Water Act (33 U.S.C. § 1313) sets forth requirements for water quality standards and the Federal regulation at 40 CFR 131.32 (relating to

Pennsylvania) sets forth certain requirements for portions of the Commonwealth's antidegradation program.

#### D. Background of the Proposed Amendments

Water quality standards are in-stream water quality goals that are implemented by imposing specific regulatory requirements (such as treatment requirements and effluent limits) on individual sources of pollution.

The Department may identify candidates for redesignation during routine waterbody investigations. Requests for consideration may also be initiated by other agencies. Organizations, businesses or individuals may submit a rulemaking petition to the Board.

The Department considers candidates for High Quality (HQ) or Exceptional Value (EV) Waters and all other designations in its ongoing review of water quality standards. In general, HQ and EV waters must be maintained at their existing quality and permitted activities shall ensure the protection of designated and existing uses.

Existing use protection is provided when the Department determines, based on its evaluation of the best available scientific information, that a surface water attains water uses identified in 25 Pa. Code §§ 93.3 and 93.4 (relating to protected water uses; and Statewide water uses). Examples of water uses protected include the following: Cold Water Fishes (CWF), Warm Water Fishes (WWF), HQ and EV. A final existing use determination is made on a surface water at the time the Department takes a permit or approval action on a request to conduct an activity that may impact surface water. If the determination demonstrates that the existing use is different than the designated use, the water body will immediately receive the best protection identified by either the attained uses or the designated uses. A stream will then be "redesignated" through the rulemaking process to match the existing uses with the designated uses. For example, if the designated use of a stream is listed as protecting WWF but the redesignation evaluation demonstrates that the water attains the use of CWF, the stream would immediately be protected for CWF, prior to a rulemaking. Once the Department determines the water uses attained by a surface water, the Department will recommend to the Board that the existing uses be made "designated" uses, through rulemaking, and be added to the list of uses identified in § 93.9 (relating to designated water uses and water quality criteria).

These streams were evaluated in response to five petitions, as well as requests from the Department's Southeast Regional Office (SERO), Southcentral Regional Office (SCRO) and Bureau of Water Standards and Facility Regulation (BWSFR) as follows:

Big Brook—Petition: (Lebanon Township (Wayne County) Board of Supervisors)

Mill Creek—BWSFR

Brooke Evans Creek-Petition: (Larry Piasecki)

Wissahickon Creek—Petition: (Upper Gwynedd Township;

Montgomery County)

Beaver Creek—SERO Stone Creek—SCRO

Furnace Run—Petition: (students from Conestoga Valley High School, Lancaster County)

Clarion River-Petition: (Iron Furnace Chapter of Trout Unlimited, the Alliance for Wetlands and Wildlife, the Commissioners of Clarion County, and Reliant Energy Mid-Atlantic Power Holding, LLČ)

These regulatory changes were developed as a result of aquatic studies conducted by the BWSFR. The physical, chemical, and biological characteristics and other information on these waterbodies were evaluated to determine the appropriateness of the current and requested designations using applicable regulatory criteria and definitions. In reviewing whether waterbodies qualify as HQ or EV waters, the Department considers the criteria in § 93.4b (relating to qualifying as High Quality or Exceptional Value Waters). Based upon the data collected in these surveys, the Board has made the designations in Annex A.

# E. Summary of Comments and Responses on the Proposed Rulemaking

The Board approved the proposed rulemaking for the Big Brook, et al. package at its February 20, 2007, meeting. The proposed rulemaking was published at 37 Pa.B. 2190 (May 12, 2007) with provision for a 45-day public comment period that closed on June 26, 2007. Comments were received from two commentators including the United States Environmental Protection Agency (EPA) Region 3 and the Upper Gwynedd Township.

The EPA Region 3 office supported the package in general, but also requested additional clarification in the stream redesignation evaluation for the Clarion River regarding which of six factors in 40 CFR 131.10(g) (relating to designation of uses) the Department is basing its decision that the CWF use is not attainable for the lower portion of the Clarion River. Subsequent discussions have satisfied the EPA that the Department's position is sufficiently supported by statements provided in the stream redesignation evaluation report which are based on § 93.4(b), which is also equivalent to 40 CFR 131.10(g).

Upper Gwynedd Township (petitioner) commented that there is no justification to maintain the Trout-Stocking (TSF) designation in the head-waters of the Wissahickon Creek where trout do not exist. The Department maintains that although the head-waters of the Wissahickon Creek are currently impaired, the designated use (TSF, MF) can be attained through water quality improvements.

#### F. Summary of Changes to the Proposed Rulemaking

No changes were made to the redesignations recommended in the proposed rulemaking.

#### G. Benefits, Costs and Compliance

- 1. Benefits. Overall, the Commonwealth, its citizens and natural resources will benefit from these changes because they provide the appropriate level of protection to preserve the integrity of existing and designated uses of surface waters in this Commonwealth. Protecting water quality provides economic value to present and future generations in the form of clean water for drinking, recreational opportunities and aquatic life protection. It is important to realize these benefits to ensure opportunity and development continue in a manner that is environmentally, socially and economically sound. Maintenance of water quality ensures its future availability for all uses.
- 2. Compliance Costs. The amendments to Chapter 93 may impose additional compliance costs on the regulated community. These regulatory changes are necessary to improve total pollution control. The expenditures necessary to meet new compliance requirements may exceed that which is required under existing regulations.

Persons conducting or proposing activities or projects must comply with the regulatory requirements relating to designated and existing uses. Persons expanding a discharge or adding a new discharge point to a stream could be adversely affected if they need to provide a higher level of treatment or best management practices to meet the designated and existing uses of the stream. These increased costs may take the form of higher engineering, construction or operating cost for point source discharges. Treatment costs and best management practices are site-specific and depend upon the size of the discharge in relation to the size of the stream and many other factors. It is therefore not possible to precisely predict the actual change in costs. Economic impacts would primarily involve the potential for higher treatment costs for new or expanded discharges to streams that are redesignated. The initial costs resulting from the installation of technologically advanced wastewater treatment processes and best management practices may be offset by potential savings from and increased value of improved water quality through more cost-effective and efficient treatment over time.

3. Compliance Assistance Plan. The regulatory revisions have been developed as part of an established program that has been implemented by the Department since the early 1980s. The revisions are consistent with and based on existing Department regulations. The revisions extend additional protection to selected waterbodies that exhibit exceptional water quality and are consistent with antidegradation requirements established by the Federal Clean Water Act and The Clean Streams Law (35 P. S. §§ 691.1—691.901). All surface waters in this Commonwealth are afforded a minimum level of protection through compliance with the water quality standards, which prevent pollution and protect existing water uses.

The redesignations will be implemented through the Department's permit and approval actions. For example, the National Pollutant Discharge Elimination System (NPDES) permitting program bases effluent limitations on the use designation of the stream. These permit conditions are established to assure water quality criteria are achieved and designated and existing uses are protected. New and expanded dischargers with water quality based effluent limitations are required to provide effluent treatment according to the water quality criteria associated with existing uses and revised designated water uses.

4. Paperwork Requirements. The regulatory revisions should have no direct paperwork impact on the Commonwealth, local governments and political subdivisions, or the private sector. These regulatory revisions are based on existing Department regulations and simply mirror the existing use protection that is already in place for these streams. There may be some indirect paperwork requirements for new or expanding dischargers to streams upgraded to HQ or EV. For example, NPDES general permits are not currently available for new or expanded discharges to these streams. Thus an individual permit, and its associated paperwork, would be required. Additionally, paperwork associated with demonstrating social and economic justification may be required for new or expanded discharges to certain HQ Waters, and consideration of nondischarge alternatives is required for all new or expanded discharges to EV and HQ Waters.

#### H. Pollution Prevention

The water quality standards and antidegradation program are major pollution prevention tools because the objective is to prevent degradation by maintaining and protecting existing water quality and existing uses. Although the antidegradation program does not prohibit new or expanded wastewater discharges, nondischarge alternatives are encouraged, and required when environmentally sound and cost effective. Nondischarge alterna-

tives, when implemented, remove impacts to surface water and reduce the overall level of pollution to the environment by remediation of the effluent through the soil.

#### I. Sunset Review

These amendments 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.

#### J. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on April 27, 2007, the Department submitted a copy of the proposed rulemaking published at 37 Pa.B. 2190, to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the Senate and House Environmental Resources and Energy Committees (Committees) for review and comment.

Under section 5(c) of the Regulatory Review Act, the Department provided IRRC and the Committees with copies of the comments received, as well as other documentation. The Department has considered all public comments in preparing these final-form regulations. No comments were received on the proposed rulemaking from IRRC or the Committees.

Under section 5.1(j.2) of the Regulatory Review Act (71 P. S. § 745.5a(j.2)), on June 18, 2008, these final-form regulations were deemed approved by the House and Senate Committees. Under section 5(g) of the Regulatory Review Act, the final-form rulemaking was deemed approved by IRRC, effective on June 18, 2008.

#### K. Findings

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, 1 Pa. Code §§ 7.1 and 7.2.
- (2) A public comment period was provided as required by law, and all comments were considered.
- (3) These final-form regulations do not enlarge the purpose of the proposal published at 37 Pa.B. 2190.

- (4) These final-form regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this Order.
- (5) These final-form regulations do not contain standards or requirements that exceed requirements of the companion Federal regulations.

#### L. Order

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department, 25 Pa. Code Chapter 93, are amended by amending  $\S\S$  93.9b, 93.9f, 93.9g, 93.9n, 93.9o and 93.9r to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.
- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for approval and review as to legality and form, as required by law.
- (c) The Chairperson shall submit this order and Annex A to IRRC and the Committees, as required by the Regulatory Review Act.
- (d) The Chairperson shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.
- (e) This order shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

JOSEPH R. POWERS, Acting Chairperson

(*Editor's Note:* For the text of the order of the Independent Regulatory Review Commission relating to this document, see 38 Pa.B. 3726 (July 5, 2008).)

**Fiscal Note:** Fiscal Note 7-410 remains valid for the final adoption of the subject regulations.

#### Annex A

TITLE 25. ENVIRONMENTAL PROTECTION PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE II. WATER RESOURCES CHAPTER 93. WATER QUALITY STANDARDS

#### § 93.9b. Drainage List B.

#### **Delaware River Basin in Pennsylvania**

#### Lackawaxen River

Stream	Zone	County	Water Uses Protected	Exceptions to Specific Criteria
	* *	* * *		
4—Van Auken Creek	Basin	Wayne	HQ-TSF, MF	None
3—Dyberry Creek	Basin, Source to Big Brook	Wayne	HQ-CWF, MF	None
4—Big Brook	Basin	Wayne	EV, MF	None
3—Dyberry Creek	Basin, Big Brook to Confluence with West Branch Lackawayen River	Wayne	HQ-CWF, MF	None

Stream	Zone	County		Water Uses Protected	Exceptions to Specific Criteria
2—Lackawaxen River	Main Stem, Confluence of West Branch Lackawaxen River and Dyberry Creek to Mouth	Wayne		HQ-TSF, MF	None
	* *	* *	*		

#### § 93.9f. Drainage List F.

#### Delaware River Basin in Pennsylvania

#### Schuylkill River

Stream	Zone	County	Water Uses Protected	Exceptions to Specific Criteria
	* *	* * *		
4—Owl Creek	Basin	Lebanon	WWF	None
4—Mill Creek (Stream Code 01936 at RM** 20.30)	Basin	Berks	CWF	None
3—Tulpehocken Creek	Blue Marsh Reservoir	Berks	WWF	None
	* *	* * *		
3—Gulley Run	Basin	Montgomery	WWF	None
3—Wissahickon Creek	Basin	Philadelphia	TSF, MF	None

#### § 93.9g. Drainage List G.

#### Delaware River Basin in Pennsylvania

#### Delaware River

Stream	Zone	County	Water Uses Protected	Exceptions to Specific Criteria
	* *	* * *		
5—Unnamed Tributaries to East Branch Brandywine Creek	Basins, in East Brandywine and Uwchlan Townships	Chester	HQ-TSF, MF	None
5—Beaver Creek	Basin	Chester	CWF, MF	None
5—Valley Creek	Basin, Source to Broad Run	Chester	CWF, MF	None
	* *	4 4 4		

#### § 93.9n. Drainage List N.

#### Susquehanna River Basin in Pennsylvania

#### Juniata River

Stream	<b>Zone</b> * *	County * * *	Water Uses Protected	Exceptions to Specific Criteria
5—Georges Creek	Basin	Bedford	WWF	None
5—Stone Creek	Basin, Source to Confluence with UNT 14908 at RM 0.34	Bedford	WWF	None
6—Unnamed Tributary (UNT) 14908 to Stone Creek	Basin	Bedford	CWF	None
5—Stone Creek	Basin, UNT 14908 to Mouth	Bedford	CWF	None
5—Bobs Creek	Basin, Source to Deep Hollow Run	Bedford	HQ-CWF	None

#### § 93.9o. Drainage List O.

# Susquehanna River Basin in Pennsylvania Susquehanna River

Stream	<b>Zone</b> * *	County * * *	Water Uses Protected	Exceptions to Specific Criteria
4—Middle Creek	Basin, Elders Run to Furnace Run	Lancaster	TSF	None
5—Furnace Run	Basin, source to SR 1026	Lancaster	HQ-CWF	None
5—Furnace Run	Basin, SR 1026 to Segloch Run	Lancaster	TSF	None
6—Segloch Run	Basin	Lancaster	EV	None
5—Furnace Run	Basin, Segloch Run to Mouth	Lancaster	TSF	None
4—Middle Creek	Basin, Furnace Run to Mouth	Lancaster	WWF	None

#### § 93.9r. Drainage List R.

# Ohio River Basin in Pennsylvania Clarion River

Stream	<b>Zone</b> * *	County * * *	Water Uses Protected	Exceptions to Specific Criteria
5—Silver Creek	Basin	Elk	HQ-CWF	None
3—Clarion River	Main Stem, Confluence of East and West Branches to Inlet of Piney Lake at RM 37.4	Clarion	CWF	None
4—Unnamed Tributaries to Clarion River	Basins, Confluence of East and West Branches to Inlet of Piney Lake at RM 37.4	Elk-Forest- Jefferson-Clarion	CWF	None
4—Johnson Run	Basin	Elk	CWF	None
	* *	* * *		
4—Blyson Run	Basin	Clarion	EV	None
3—Clarion River	Main Stem, Inlet of Piney Lake at RM 37.4 to Mouth	Clarion	WWF	None
4—Unnamed Tributaries to Clarion River	Basins, Inlet of Piney Lake at RM 37.4 to Mouth	Clarion	CWF	None
4—Mill Creek	Main Stem, Source to Little Mill Creek	Clarion	HQ-CWF	None
	at at	als als als		

 $[Pa.B.\ Doc.\ No.\ 08\text{-}1457.\ Filed\ for\ public\ inspection\ August\ 8,\ 2008,\ 9\text{:}00\ a.m.]$ 

# ENVIRONMENTAL QUALITY BOARD [ 25 PA. CODE CHS. 209 AND 209a ] Coal Mines

The Environmental Quality Board (Board) by this order rescinds Chapter 209 (relating to coal mines) and adds Chapter 209a (relating to surface mining). This final-form rulemaking revokes existing, antiquated anthracite and bituminous safety regulations and replaces them with selected Federal safety regulations that are adopted by reference. In addition, selected Federal safety regulations for industrial mineral mines are also adopted by reference.

This order was adopted by the Board at its meeting of April  $15,\,2008.$ 

#### A. Effective Date

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final-form 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, (800) 654-5984 (TDD users) or (800) 654-5988 (voice users). This final-form rulemaking is available on the Department of Environmental Protection's (Department) web site at www. depweb.state.pa.us.

#### C. Statutory Authority

The final-form rulemaking is adopted under the authority of:

- 1. Section 4.2 of the Surface Mining Conservation and Reclamation Act (SMCRA) (52 P. S. § 1396.4b) and section 11(a) of the Noncoal Surface Mining Conservation and Reclamation Act (NSMCRA) (52 P. S. § 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, among other things, 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), which authorize the Board to adopt regulations to prevent the occurrence of a nuisance and to promulgate rules and regulations necessary for the proper work of the Department.

#### D. Background and Purpose

The Department's surface mine safety program is implemented by surface mining conservation inspectors. As part of the environmental inspection, the inspector also identifies unsafe conditions and works with the operator to correct those conditions before an accident occurs. The inspector's ability to identify and correct unsafe conditions is hampered by the inadequacy and limited scope of the surface mining safety regulations in Chapter 209. Chapter 209, Subchapter A (relating to general safety in bituminous coal strip mines) is antiquated and differs from safety requirements established by the United States 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. The effectiveness of the Department's safety program at anthracite surface mines is compromised because the existing regulations are limited to blasting. There are no Pennsylvania safety regulations for anthracite surface mines. Furthermore, the Chapter 209, Subchapter B (relating to explosives in anthracite coal strip mines) anthracite surface coal mine blasting regulations are not only out-of-date, but are unneeded. The storage, handling and use of explosives at anthracite surface mines are addressed by Chapters 88 and 211 (relating to anthracite coal; and storage, handling and use of explosives). Finally, Department safety efforts for surface industrial mineral mines are hampered because there are no Pennsylvania safety standards for these mines.

This final-form rulemaking addresses the Rendell Administration's initiative to develop a "world class mine safety program." To implement this initiative, Chapter 209 is rescinded and replaced with new standards for coal and industrial mineral surface mines. For the most part, this final-form rulemaking adopts by reference MSHA safety standards contained in 30 CFR Parts 56 and 77 (relating to safety and health standards—surface metal and nonmetal mines; and mandatory safety standards, 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.

These amendments achieve the Department's goal of providing superior safety at surface mines in this Commonwealth, in the most cost effective and the least intrusive manner possible. The provisions of the MSHA regulations adopted by this final-form rulemaking are: those that address the most significant risk to surface miners in this Commonwealth, provisions that the Department inspection staff have sufficient expertise to implement and provisions that apply to areas where the Department staff would normally go during the environmental and safety inspections they currently conduct. The Board did not adopt the MSHA regulations that would require the Department inspection staff to obtain and be trained in the use of specialized equipment or would require Department inspectors to expand their routine inspection area. In addition, the Board did not adopt the MSHA regulations which contain standards that are addressed by existing Department regulations. This approach allows for improvements in overall safety without increased costs.

The Department will work closely with MSHA and provide training to its inspectors to further minimize differences in the interpretation of all of MSHA's regulations. Additionally, all Pennsylvania Surface Mine Inspectors have routine MSHA safety training. Some of Pennsylvania's Surface Mine Inspectors are "MSHA certified" safety instructors.

The provisions of these regulations that are more stringent than the MSHA regulations are related to auger mining. MSHA regulations apply Nationally and are necessarily broad. To reflect conditions in this Commonwealth's coal mines, these regulations require additional benching of highwalls at mines where augering occurs. These auger mining provisions are more specific than the MSHA requirements.

The Department's accident reporting requirements are less stringent than those of MSHA. During accident investigations, the Department will defer to MSHA's lead and provide assistance. Since the Department's role in these investigations, is secondary to MSHA's, this regulation requires reporting of accidents to the Department in 1 hour. MSHA requires reporting of accidents within 15 minutes. Additionally, the Board has not adopted provisions of the MSHA regulations directly related to incidents that cause occupational illnesses or injuries and will not require reporting of these incidents. The only incidents the Department requires to be reported are those defined in the regulations as accidents.

On many surface mine sites, the Department conducts inspections more frequently than MSHA. Effective safety programs rely on the principle of prevention. Constant reminders of hazards helps prevent complacency that can lead to accidents. With these final-form regulations in place, the higher awareness provided by the Department's inspectors will help prevent accidents and result in a safer work environment at surface mines in this Commonwealth.

At a meeting on January 25, 2007, the Mining and Reclamation Advisory Board (MRAB) considered the proposed rulemaking as it applied to surface coal mining. The MRAB unanimously recommended that the Board move forward with the proposed rulemaking. On January

- 10, 2008, the MRAB recommended that the Department proceed with the final-form rulemaking with the changes specified as follows.
- E. Summary of Changes Made in the Final-Form Rulemaking
- § 209a.10(b) (relating to auger mining)

Throughout the regulation, "Department" has been used instead of "Department of Environmental Protection." For consistency, "Department of Environmental Protection" found in § 209a.10(b) has been changed to "Department." This change was made in response to a comment described as follows.

§ 209a.42(a) (relating to accident reporting)

The definition of "accident" has been modified to specify what constitutes an accident under this regulation. The accident reporting section of the proposed regulation is not an MSHA regulation reference, but uses MSHA regulations as a guideline. The definition of "accident" in the final-form rulemaking is a subset of what constitutes an accident for MSHA. The MSHA accident reporting regulations apply to surface and underground mining. For the purposes of these surface mining regulations, MSHA's definition of an accident is overly broad because it includes events that occur on the surface and underground. In response to a comment described as follows, the definition of "accident" has been modified. The definition of "accident" is now limited to incidents that occur on surface mines that cause death or serious injuries, or have a reasonable potential to do so. In addition, the definition of accident now includes rock bursts.

§ 209a.42(b)

The provisions of the proposed regulation requiring the Department be contacted within an hour of an accident are amended to specify how to contact the Department. Specifically, the final-form rulemaking directs the operator of a mine where an accident occurs to contact the district mining office having jurisdiction over the mine. Additionally, the final rulemaking provides that if contact cannot be made with the district mining office, the operator shall contact the Department's 24 hour emergency telephone number. These changes were made to enhance consistency and clarity.

§ 209a.42(c)

The provisions of the proposed regulation which require that MSHA accident reporting forms be submitted to the Department have been revised. Specifically, the final-form rulemaking directs the operator of a mine where an accident occurs to mail to the Department's district mining office having jurisdiction over the mine all forms submitted to MSHA regarding the accident. The final-form rulemaking has been amended to eliminate the reference to a specific MSHA form. Additionally, it sets a time of 10 days in which the forms must be submitted to the Department. These changes were made for consistency and clarity.

§ 209a.43 (relating to alternative standards)

The proposed rulemaking has been amended to add a subsection addressing pending mine-specific variance requests. This new subsection provides that the Department, for petitions for mine-specific alternative standard requests that are pending with MSHA upon the effective date of this rulemaking, will adopt that modified mine-specific safety and health standard upon the operator's submission of a copy of MSHA's approval of the alterna-

tive standard to the Department. This change was in response to a comment described as follows.

F. Summary of Comments and Responses on the Proposed Rulemaking

Selection of Sections Adopted by Reference

A commentator asked how the Board determined which selected sections of 30 CFR Parts 56 and 77 (relating to safety and health starndards—surface metal and nonmetal; and mandatory safety standards, surface coal mines and surface work areas of underground coal mines) to adopt, and therefore enforce.

The Board chose to adopt the portions of 30 CFR 56 and 77 that focus on: the activities in which the most serious accidents occurred, provisions that the Department inspection staff have sufficient expertise to regulate and provisions applying to areas where the Department staff normally goes during the environmental and safety inspections they currently conduct. The Federal provisions which require expertise beyond that of the Department's inspection staff were not adopted. Also not adopted were provisions that would require the Department inspection staff to obtain and be trained in the use of specialized equipment, or which would require the inspectors to expand their routine inspection areas. Finally, the Board did not adopt Federal provisions that are already addressed by other Department regulations.

#### Compliance Assistance

A commentator pointed out that while there is merit in a compliance assistance program to improve safety, the details of a Department inspector's actions were not clearly explained in the preamble of the proposed rule-making. The commentator questioned how a Department inspector is qualified to determine how MSHA would interpret its Federal regulations where the Board left sole jurisdiction to MSHA. Additionally, the commentator asked what expectations will be placed on an operator offered compliance assistance, what recourse an operator has if the operator disagrees with the Department's interpretation, or what if MSHA's interpretation of the regulation differs from the Department's.

All of this Commonwealth's surface mine inspectors have routine MSHA safety training, and some surface mine inspectors are "MSHA certified" safety instructors. The Department has the statutory authority, and obligation, to improve the safety and safety awareness on mine sites. For example, when an inspector has the expertise to clearly identify noncompliance with an MSHA regulation, he may provide assistance for mine operators in complying with the MSHA regulations that the Department has not adopted. If a Commonwealth inspector is aware of a violation of an MSHA safety regulation that the Commonwealth has not adopted, the inspector will point out the condition and explain to the permittee that it may be a violation of an MSHA regulation. Compliance assistance will be used in identifying potential MSHA compliance issues and letting the permittee take action at its discretion.

#### Auger Mining

A commentator recommended that for consistency with the rest of this regulation, § 209a.10(b) should use the term "Department," as it is defined in 25 Pa. Code § 1.1 instead of Department of Environmental Protection.

This change has been made to the final-form regulation.

#### Accident Reporting

Commentators stated that the requirement to report all accidents, including minor accidents and occupational injuries, within 1 hour of their occurrence would be overly burdensome to the mining industry as well as the Department.

The regulations have been amended to require that only accidents that result in death or serious injury, or have the potential to cause death or serious injury, be reported to the Department within 1 hour.

#### Alternative Standards

A commentator stated that alternative standards for past and future decisions by MSHA are allowed, but pending filings with MSHA are not addressed.

The Board has amended this final-form regulation to provide for adoption of a mine-specific alternative standard that is pending with MSHA and approved after the effective date of this final-form rulemaking. To obtain the Department's approval, the mine operator must submit a copy of the MSHA approval of the mine-specific alternate standard to the Department.

#### Access to Documents

Commentators expressed that the Department should only have access to the records prepared to comply with the Federal regulations adopted by reference and not have access to all records required by MSHA.

Limiting the Department's access to records that MSHA requires operators to keep may hinder the Department's ability to thoroughly investigate accidents. It is reasonable to require access to any documents relating to mine safety to ensure that thorough investigations are conducted to determine the causes of accidents.

#### G. Benefits, Costs and Compliance

#### Compliance Costs

This final-form rulemaking will not impose additional compliance costs on the regulated community. Surface mines in this Commonwealth must already comply with these Federal safety regulations. In fact, the implementation of this rulemaking should result in cost savings in that accidents will be prevented. There are no additional costs expected to be incurred by the Commonwealth.

#### Compliance Assistance Plan

The Department's inspectors will be available to explain the new regulations to each job foreman.

#### Paperwork Requirements

This final-form rulemaking establishes two paperwork requirements. First, there is a requirement to submit to the Department copies of the application request to, and MSHA's subsequent approval of, a modification of a health and safety standard that has been incorporated by reference into this final-form rulemaking. 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.

#### H. Pollution Prevention

The final-form rulemaking will not modify the pollution prevention approach by the regulated community and maintains the multimedia pollution prevention approach of existing requirements in 25 Pa. Code (relating to environmental protection).

#### I. Sunset Review

The 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.

#### J. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on August 16, 2007, the Department submitted a copy of the notice of proposed rulemaking, published at 37 Pa.B. 4754 (September 1, 2007), to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees (Committees) for review and comment.

Under section 5(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing these final-form regulations, the Department has considered all comments from IRRC, the Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act, on June 18, 2008, 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 June 19, 2008, and approved the final-form regulations.

#### K. Findings of the Board

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, and all comments were considered.
- (3) These regulations do not enlarge the purpose of the proposal published at 37 Pa.B. 4754.
- (4) These regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this order.

#### L. Order of the Board

The Board, acting under the authorizing statutes, orders that:

- (a) The regulations of the Department are amended by deleting §§ 209.1-209.3, 209.11-209.13, 209.21-209.27, 209.31-209.35, 209.41-209.47, 209.51-209.65, 209.71-209.77, 209.81-209.87, 209.91-209.93, 209.101-209.103, 209.111-209.115, 209.121, 209.122, 209.141-209.145, 209.151-209.154, 209.161-209.172, 209.181-209.187, 209.191-209.193 and 209.201-209.203; and by adding §§ 209a.1-209a.13, 209.21a-209a.33, 209a.41 and 209a.44 to read as set forth in 37 Pa.B. 4754; and by adding §§ 209a.42 and 209a.43 to read as set forth in Annex A.
- (b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.
- (c) The Chairperson of the Board shall submit this order and Annex A to IRRC and the Committees as required by the Regulatory Review Act.

- (d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.
  - (e) This order shall take effect immediately.

JOSEPH R. POWERS

Acting Chairperson

(*Editor's Note*: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 38 Pa.B. 3726 (July 5, 2008).)

**Fiscal Note:** Fiscal Note 7-414 remains valid for the final adoption of the subject regulations.

#### Annex A

# TITLE 25. ENVIRONMENTAL PROTECTION PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

# Subpart D. ENVIRONMENTAL HEALTH AND SAFETY

## ARTICLE IV. OCCUPATIONAL HEALTH AND SAFETY

#### CHAPTER 209a. SURFACE MINING Subchapter C. MISCELLANEOUS PROVISIONS § 209a.42. Accident reporting.

- (a) Unless the context clearly indicates otherwise, as used in this subchapter, an accident is an incident that results in one or more of the following:
  - (1) A death of an individual at a mine.
- (2) Serious bodily injury to an individual at a mine or an injury to an individual at a mine which has a reasonable potential to cause death.
- (3) An entrapment of an individual for more than 30 minutes or which has a reasonable potential to cause death.
- (4) An unplanned inundation of a mine by a liquid or gas.
  - (5) An unplanned ignition or explosion of gas or dust.
- (6) An unplanned mine fire not extinguished within 30 minutes of discovery.
- (7) An unplanned ignition or explosion of a blasting agent or an explosive.
- (8) A failure of an impoundment, refuse pile or culm bank; or an unstable condition at an impoundment, refuse pile or culm bank which requires emergency action to prevent failure, or which causes individuals to evacuate an area.
- (9) A coal or rock outburst that causes withdrawal of miners or which disrupts regular mining activity for more than 1 hour.

- (10) An event at a mine which causes death or bodily injury to an individual not at the mine at the time the event occurs.
- (b) If an accident occurs, an operator shall contact the Department's district mining office with jurisdiction for the mine within 1 hour of discovery of the accident. If an operator cannot make contact with the appropriate district mining office, it shall contact the Department's 24 hour emergency number within 1 hour of the accident.
- (c) The operator of a mine at which an accident occurs shall mail copies of the completed MSHA accident reporting forms to the Department's district mining office with jurisdiction for the mine. These copies are in addition to accident reporting forms sent to MSHA and shall be mailed to the Department within 10 working days after the accident occurs.

#### § 209a.43. Alternative standards.

- (a) If, as of August 9, 2008, the United States Department of Labor, Mine Safety and Health Administration (MSHA) has adopted a mine specific modification of a safety and health standard incorporated by reference in this chapter for a mine in this Commonwealth, that mine specific modified safety and health standard will be adopted by the Department if the operator submits to the Department's district mining office with jurisdiction for the mine a copy of MSHA's adoption of the modification.
- (b) If, as of August 9, 2008, an operator has submitted to MSHA, but MSHA has not yet adopted, a petition for a mine specific modification of a safety and health standard incorporated by reference in this chapter for a mine in this Commonwealth, that mine specific modified safety and health standard will be adopted by the Department if the operator submits to the Department's district mining office with jurisdiction for the mine a copy of MSHA's approval of the modification.
- (c) If, after August 9, 2008, an operator submits a petition for a mine specific modification of a safety and health standard incorporated by reference in this chapter for a mine located in this Commonwealth, that mine specific modified safety and health standard will be adopted by the Department upon MSHA's adoption of the modification if the operator:
- (1) Provides the Department's district mining office with jurisdiction for the mine with a copy of the petition and a copy of all supporting materials submitted to MSHA, upon submission to MSHA.
- (2) Submits to the Department's district mining office with jurisdiction for the mine a copy of MSHA's approval of the modification.

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