

Regulatory Analysis Form

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INDEPENDENT REGULATORY
REVIEW COMMISSION
IRRC Number: 2560

(1) Agency
Environmental Protection

(2) I.D. Number (Governor's Office Use)
7-400

(3) Short Title
Mine Opening Blasting

(4) PA Code Cite §§ 77.1, 77.564(b), (c),
(f), 87.1, 87.124(b), 87.126(b)(2)(ii),
87.127(a), (b), (e), (f) and (l), 87.129(4),
88.1, 88.135(a), (b), (f)(1), (h), (i), and (l),
88.137(4), 88.493(7)(i), 89.5, 89.62,
210.11, 210.12 and 210.17

(5) Agency Contacts & Telephone Numbers

Primary Contact: Michele Tate, 783-8727

Secondary Contact: Kelly Jean Heffner, 783-8727

(6) Type of Rulemaking (Check One)

☐ Proposed Rulemaking

☒ Final Order Adopting Regulation

☐ Final Order, Proposed Rulemaking Omitted

(7) Is a 120-Day Emergency Certification
Attached?

☒ No

☐ Yes: By the Attorney General

☐ Yes: By the Governor

(8) Briefly explain the regulation in clear and nontechnical language.

These amendments achieve several objectives. First, they clarify that the surface mining regulations for the use of explosives apply to surface blasting in connection with the development of a mine opening from the surface to the coal seam or mineral deposit to be mined. Second, they modify the scheduling requirements so that blasting for a mine opening, after the second blast, may occur at any time of day or night for worker safety. Third, they provide coal mine operators with greater flexibility in determining the measures to be taken to protect persons on highways located near mining blasting. They establish a classification for licensing blasters engaged in blasting for mine openings. Additionally, technical corrections were made to provide either consistency with federal regulations, consistency between the blasting regulations, or to eliminate an unnecessary provision.

(9) State the statutory authority for the regulation and any relevant state or federal court decisions.

Section 4.2 of the Surface Mining Conservation and Reclamation Act ("SMCRA") and Section 11 of the Noncoal Surface Mining Conservation and Reclamation Act ("NCSMCRA") (52 P.S. §§ 1396.4b and 3311(e)), which allow the Environmental Quality Board to promulgate regulations concerning the use of explosives at coal and noncoal surface mine sites as well as the licensing of blasters; and Sections 1917-A and 1920-A of the Administrative Code of 1929, 71 P.S. § 510-17 and 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.

(10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action.

No.

(11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?

Surface blasting in connection with the development of an opening from the surface to coal seam or other mineral being mined at an underground mine is subject to the regulations for anthracite, bituminous or industrial mineral surface mining. Since mine openings are sometimes located close to areas of habitation, it is necessary for the Department to require all the blasting in connection with the construction of a mine opening to comply with the surface mining blasting regulations. However, the mining regulations are somewhat ambiguous and could be construed, as only mandating that the initial blasts needed to start the mine opening must comply with the surface mining blasting regulations. Applying the requirements for the scheduling of blasts to all mine opening blasting poses a risk to mine workers without necessarily protecting the rest of the public. In addition, barricading a highway, as required by §§ 87.127 and 88.135 is not always the safest method for protecting the motoring public from blasting near that highway.

(12) State the public health, safety, environmental or general welfare risks associated with non-regulation.

Limiting mine opening blasting to the daylight hours increases the possibility that mine workers engaged in the construction of an opening for an underground mine will be at risk for injury or entrapment due to rock fall. In addition, the use of barricades may place persons driving on highways near blasting at greater risk for injury from a traffic accident rather than the other hazards associated with blasting (e.g. flyrock).

(13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)

The operators of the approximately 1,500 coal and industrial mineral surface mines authorized to conduct blasting will benefit. In addition, if any of the approximately 65 underground coal and industrial mineral mines need a new opening, then the operators of those mines will also benefit from these regulations. In the past 5 years approximately 15 mine openings have been developed. The benefit of these amendments is increased flexibility for the mine operators and improved safety for workers developing mine openings. The public will also benefit with increased clarity and safety requirements.

(14) Describe who will be adversely affected by the regulation. (Quantify the adverse effect as completely as possible and approximate the number of people who will be adversely affected.)

It is anticipated that no one will be adversely affected by this rulemaking.

(15) List the persons, groups or entities that will be required to comply with the regulation. (Approximate the number of people who will be required to comply.)

See answer to item 13.

(16) Describe the communications with and input from the public in the development and drafting of the regulation. List the persons and/or groups who were involved, if applicable.

The Department met with the primary mine opening development contractor from the bituminous coal field to discuss their concerns. These concerns are addressed in the regulations. The Mining and Reclamation and Advisory Board (MRAB) discussed this 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 surface mining blasting. The MRAB directed DEP to proceed to the Board and to note MRAB's position in the final rulemaking package. The Mining and Reclamation Advisory Board (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 regulation 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 appreciates the advice of the MRAB, the Department will move forward to final rulemaking. The Department recommends proceeding to final 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..."

(17) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures, which may be required.

This amendment does not impose any additional costs on the regulated community. All blasting in connection with the construction of a mine opening, from the surface to the coal seam or mineral to be mined, is being required 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 give the operator greater flexibility in meeting the requirements applicable to mine opening blasting, and the requirements for precautions to be taken when blasting is in proximity to a public road.

(18) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures, which may be required.

This is not applicable because local governments are not subject to these regulations.

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting or consulting procedures which may be required.

Not applicable.

(20) In the table below, provide an estimate of the fiscal savings and cost associated with implementation and compliance for the regulated community, local government, and state government for the current year and five subsequent years.

	Current FY Year	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
SAVINGS:	\$	\$	\$	\$	\$	\$
Regulated Community	0	0	0	0	0	0
Local Government	0	0	0	0	0	0
State Government	0	0	0	0	0	0
Total Savings	0	0	0	0	0	0
COSTS:						
Regulated Community	0	0	0	0	0	0
Local Government	0	0	0	0	0	0
State Government	0	0	0	0	0	0
Total Costs	0	0	0	0	0	0
REVENUE LOSSES:						
Regulated Community	0	0	0	0	0	0
Local Government	0	0	0	0	0	0
State Government	0	0	0	0	0	0
Total Revenue Losses	0	0	0	0	0	0

(20a) Explain how the cost estimates listed above were derived.

The amendments will not change the Department's costs for regulating the mining industries. As described above, these regulations will not impose costs on the regulated community. Local governments are not subject to these regulations.

(20b) Provide the past three-year expenditure history for programs affected by the regulation.

Program	FY-3 (2004-2005)	FY-2 (2005-2006)	FY-1 (2006-2007)	Current FY (2007-2008)
General Government Operations (#181-10390)	\$18,824,000	\$18,262,000	\$18,329,000	\$18,915,000

(21) Using the cost-benefit information provided above, explain how the benefits of the regulation outweigh the adverse effects and costs.

While the financial benefits would be difficult to calculate, there are no costs associated with this rulemaking. Clarifying that mine opening blasting is surface mining activity saves the costs of unwitting failure to comply with the regulations. The costs of serious injury or death of workers is incalculable. Having a category of blaster's license that requires the blaster to have knowledge of safe underground blasting as well as limiting the adverse effects of the blasting on the surface will provide protection for workers as well as the public and their property.

(22) Describe the non-regulatory alternatives considered and the costs associated with those alternatives. Provide the reasons for their dismissal.

The only other approach, which could be taken, is to require all mine opening blasting to comply with the mining explosives requirements but use special conditions in mining permits to permit blasting after sunset and to permit alternate protective measures when blasting is near public highways. Given the existing regulatory language, it is likely that such special conditions would not survive a legal challenge.

(23) Describe alternative regulatory schemes considered and the costs associated with those schemes. Provide the reasons for their dismissal.

There are two potential alternative regulatory approaches.

1. Strictly enforce the existing regulations. This approach was rejected as posing an unacceptable risk to mine workers and the public for the following reasons:
 - (a) The costs of serious injury or death of workers is incalculable.
 - (b) The cost of re-excavating a shaft which collapsed as a result of an interruption in the development of the shaft because day and night blasting is not allowed would be very high.
 - (c) Barricading highways is not always the best method for protecting the public from mine blasting near that highway. The risk of liability from accidents relating to barricading of public highways is high. Blocking limited access highways usually costs thousands of dollars per occurrence.
2. Exempt surface blasting in connection with the development of mine openings from the regulatory requirements. This alternative was rejected because it fails to adequately protect the surrounding public from the potential adverse affects related to mine opening blasting (i.e. ground vibrations, air blasts, and flyrock).

(24) Are there any provisions that are more stringent than federal standards? If yes, identify the specific provisions and the compelling Pennsylvania interest that demands stronger regulation.

Yes. Explicitly requiring all mine opening construction blasting to be subject to the surface mining blasting regulations is more stringent than the applicable U.S. Office of Surface Mining Reclamation and Enforcement ("OSM") regulations. The OSM regulations only apply to the initial blasts necessary to start constructing the mine opening. The Department has received complaints about blasting for shaft development. The complaints relate to nuisance, the risk of flyrock, ground vibration and airblast.

(25) How does the regulation compare with those of other states? Will the regulation put Pennsylvania at a competitive disadvantage with other states?

Other states regulating coal mining have regulations similar to those in this rulemaking. Some of the other states regulations for industrial minerals are less stringent than the current regulations. These final-form regulations provide greater flexibility in conducting blasting activities. Therefore, they do not put Pennsylvania's mining industry at a competitive disadvantage.

(26) Will the regulation affect existing regulations of the promulgating agency or other state agencies? If yes, explain and provide specific citations.

No.

(27) Will any public hearings or informational meetings be scheduled? Please provide the dates,

times, and locations, if available.

There is no need for public hearings or informational meetings.

(28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.

No.

(29) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

None.

(30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?

Upon publication as a final regulation. However, this regulation will not require any new permits, licenses or approvals.

(31) Provide the schedule for continual review of the regulation.

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

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Copy below is hereby approved as to form and legality.
Attorney General

By: _____
(Deputy Attorney General)

DATE OF APPROVAL _____

☒ Check if applicable
Copy not approved. Objections attached.

Copy below is hereby certified to be true and
correct copy of a document issued, prescribed or
promulgated by:

DEPARTMENT OF ENVIRONMENTAL
PROTECTION
ENVIRONMENTAL QUALITY BOARD

(AGENCY)

DOCUMENT/FISCAL NOTE NO. 7-400

DATE OF ADOPTION April 15, 2008

BY _____

TITLE **KATHLEEN A. MCGINTY
CHAIRPERSON**

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

Copy below is hereby approved as to form and legality
Executive or Independent Agencies

BY _____

Andrew C. Clark

DATE OF APPROVAL

APR 29 2008

(Deputy General Counsel)
(Chief Counsel - Independent Agency)
(Strike inapplicable title)

☒ Check if applicable. No Attorney General Approval
or objection within 30 days after submission.

NOTICE OF FINAL RULEMAKING

DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL QUALITY BOARD

Mine Opening Blasting

25 Pa. Code, Chapters 77, 87-89, and 210

NOTICE OF FINAL RULEMAKING
DEPARTMENT OF ENVIRONMENTAL PROTECTION
ENVIRONMENTAL QUALITY BOARD
25 PA. CODE CHS. 77, 87-89 and 210
Mine Opening Blasting

Order

The Environmental Quality Board (Board) by this order amends Chapters 77, 87, 88, 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, or 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 being made under the authority of:

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); 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 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 Chapter 77, Chapter 87 or Chapter 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. 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 Surface Mining Conservation and Reclamation Act (SMCRA) and the Noncoal Surface Mining Conservation and Reclamation Act (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 §§ 87.124(d) (relating to use of explosives: general requirements), 88.134(c) (relating to blasting: general requirements) and 210.12 (relating 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 *et seq.* and 701-101 *et seq.*) 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 daylight 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 in the September 2, 2006, *Pennsylvania Bulletin*. 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 Mining and Reclamation Advisory Board (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 regulation 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 appreciates the advice of the MRAB, the Department will move forward to final rulemaking. The Department recommends proceeding to final 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 rulemaking at its May 17, 2006 meeting, and the notice of Proposed Rulemaking was published in the Pennsylvania Bulletin on September 2, 2006 (26 Pa. B. 5608). Below 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) (relating to surface blasting requirements), 87.127(a) (relating to use of explosives: surface blasting requirements), and 88.135(a) (relating to blasting: blasting requirements) 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 e.g.* § 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 regulation 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.

Such 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 e.g.* § 77.564(f) and (i) (relating to surface blasting requirements). 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 negate 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 included in this final 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, is being required 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 rulemaking 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 it was intended.

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.

Under section 5(c) of the Regulatory Review Act, the 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 (blank), these final-form regulations were deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, the IRRC met on (blank) and approved the final-form regulations.

I. 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 Pennsylvania 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 36 *Pennsylvania Bulletin* 5608 on September 2, 2006.

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

J. Order of the Board

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

(a) The regulations of the Department of Environmental Protection, 25 *Pennsylvania Code*, Chapters 77, 87-89 and 210 are amended 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 the Independent Regulatory Review Commission and the Senate and House Environmental Resources and Energy 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.

BY:

KATHLEEN A. MCGINTY
Chairperson
Environmental Quality Board

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 [excessive noise] the adverse affects of GROUND vibration, AIRBLAST, or safety hazards.

(f) Airblasts shall be controlled so that they do not exceed [~~the noise level specified in this subsection at~~] 133 dBL a dwelling, public building, school, church 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) Maximum allowable noise levels.~~

<i>Lower-Frequency Limits of Measuring System</i>	<i>Maximum Level in dB</i>
.1 Hz or lower flat response	134 peak
2 Hz or lower flat response	133 peak
6 Hz or lower flat response	129 peak
e-weighted, slow response	105C}

[~~(2)~~] ~~(1)~~*****

[~~(3)~~] ~~(2)~~*****

* * * * *

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.

* * * * *

(b) Blasts that use more than 5 pounds of explosive or blasting agents shall be conducted according to the schedule required by § 87.[125]**126** (relating to use of explosives: **[preblasting survey] public notice of blasting schedules**).

* * * * *

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

* * * * *

(b) *Blasting schedule contents.*

* * * * *

(2) The blasting schedule [shall] must contain at a minimum the following:

* * * * *

(ii) Dates and time periods when explosives are to be detonated. **[Each period may not exceed 4 hours.]**

* * * * *

§ 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 OR AIRBLAST vibration limits at a dwelling, public building, school, church or commercial or institutional structure, that are less stringent than those specified in subsection (e) or (n) 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 **[excessive noise] the adverse affects of GROUND vibration, AIRBLAST, or safety hazards.**

* * * * *

(e) **[An airblast] Airblast** shall be controlled so that it does not exceed the **[noise]** level specified in this subsection at a dwelling, public building, school, church 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] 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) **[Maximum] The maximum** allowable **[noise] AIRBLAST** **[levels: Lower frequency limit of measuring system in Hz (+ 3 dB)**

Maximum level (dB) 0.1 Hz or lower flat response 134, peak 2 Hz or lower flat response] level is 133[, peak 6 Hz or lower flat response 129, peak c-weighted, slow response 105 peak dBC] 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 [1,000] 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 $W = (D/D_s)^2$ 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 D_s 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 ~~[(n)]~~ (m) at a 95% confidence level.

* * * * *

[(l)] (l) ***
The use of a formula to determine maximum weight of explosives per delay for blasting operations at a particular site may be approved by the Department if the peak particle velocity of 1 inch per second required in § 87.126 (relating to use of explosives: public notice of blasting schedule) would not be exceeded.]**

[(m)] (l) *****

[(n)] (m) *****

[(o)] (n) *****

[(p)] (o) *****

* * * * *

§ 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, **[shall] must** be made a part of that record. The record **[shall] must** contain the following data:

* * * * *

(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.

* * * * *

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 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 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 OR AIRBLAST vibration 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 [excessive noise] the adverse affects of GROUND vibration, AIRBLAST, or safety hazards.

* * * * *

(f) Blasting operations [shall] **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 [1,000] 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.

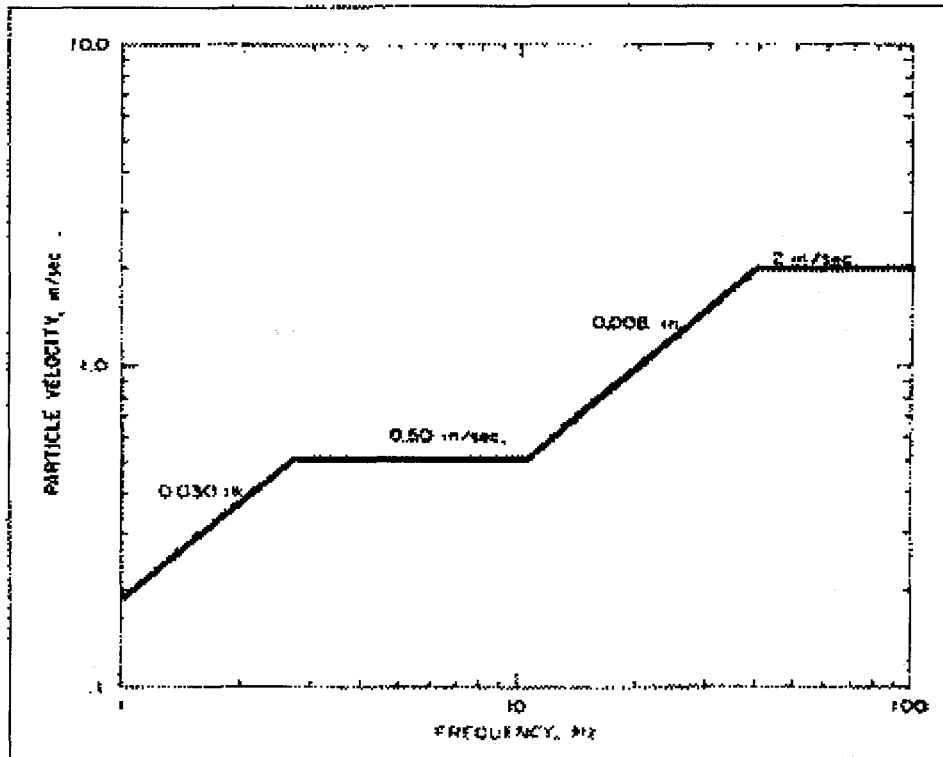
(V) The burden and spacing.

(VI) The amount and type of stemming.

(VII) The powder factor.

* * * * *

(h) In all blasting operations, [the maximum peak particle velocity may not exceed 2 inches per second] 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 ~~[sound pressure]~~ AIRBLAST level may not exceed [130 dB linear at a frequency 6 Hz or lower] 133 dBL.



(i) The maximum peak particle velocity [limitation] and [sound pressure] AIRBLAST limitations of this section do not apply at the following locations:

* * * * *

[(l) The use of a formula to determine maximum weight of explosives per delay for blasting operations at a particular site, may be approved by the Department if the peak particle velocity of 2 inches per second would not be exceeded.]

[~~(m)~~] I *****

* * * * *

§ 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, [shall] MUST be made a part of that record. The record [shall] MUST contain the following data:

* * * * *

(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.

* * * * *

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 shall include:

(i) A person who conducts surface blasting activities incident to underground mining activities, including, but not limited to, **[initial rounds of slopes, shafts and tunnels,]** **mine opening blasting** shall conduct the activities in compliance with §§ 88.45 and 88.134--88.137.

* * * * *

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, **[initial rounds of slopes and shafts,]** **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 LICENSE

§ 210.11. 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 mineral strata to be or being extracted.

* * * * *

§ 210.12. Scope.

This chapter applies to persons engaging in the detonation of explosives within this Commonwealth. [This] 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:

* * * * *

§ 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.

* * * * *

**RULEMAKING
ON
MINE OPENING BLASTING

COMMENT/RESPONSE DOCUMENT**

This document presents comments submitted in regard to the Environmental Quality Board's proposed rulemaking on Mine Opening Blasting and the Department's responses to those comments. The Environmental Quality Board approved publication of the proposed amendments at its meeting on May 17, 2006. The proposed rulemaking was published in the *Pa. Bulletin* on September 2, 2006. See 36 Pa. Bull. 5608 (September 2, 2006). Public comments were accepted from September 2, 2006 to October 2, 2006 and the comment period officially closed on October 2, 2006.

List of Commentators

1. Pennsylvania Coal Association
212 North Third Street
Suite 102
Harrisburg, PA 17101
2. Independent Regulatory Review Commission
333 Market Street, 14th Floor
Harrisburg, PA 17101

1. § 87.1, 87.127(a), 88.1, 88.135(a), 88.493(7)(i), 89.5, 89.62, 210.11, 210.12, and 210.17.

Comment

Does the Department have the statutory authority to regulate all blasting in connection with the construction of a coal mine opening as surface mining blasting including requiring all mine opening blasting to be performed by a blaster licensed under Chapter 210? Commentators No. 1 and 2.

Response

Both the Surface Mining Conservation and Reclamation Act (SMCRA) and the Noncoal Surface Mining and Reclamation Act (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 the statutes.

The SMCRA regulates all surface mining activity. *See* §§ 1396.1 (relating to purpose of act) and 1396.4b(a) (relating to general rulemaking; health and safety). Surface mining activity is defined broadly to include “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 and activities related thereto; but it does not include those mining operations carried out beneath the surface by means of shafts, tunnels or other underground mine openings.*” § 1396.3 (*emphasis added*).

By expressly listing construction of underground mine openings (tunnel, drift, shaft and slope) as a regulated activity, excluding only the actual mining operations carried out beneath the surface by means of the mine opening, the General Assembly has stated the intention to treat the construction of the entire mine opening as a regulated surface mining activity. Therefore, all of the blasting, not just the first two rounds, related to the construction of the mine opening is a surface mining activity regulated by the SMCRA and its implementing regulations.

The General Assembly had two purposes in adopting the SMCRA’s 1980 amendments. They wished to obtain primacy, and preserve existing Pennsylvania law to the maximum extent possible. *See*, Act of October 10, 1980, P.L. 835, No. 155, § 17. The Department has always construed these dual purposes to mean, except where necessary to obtain or preserve primacy, the Department should continue to interpret Pennsylvania law in a manner that advances one of the fundamental goals of the SMCRA, *i.e.* protecting the public’s health, safety and welfare from the adverse affects of surface mining activity. For example, since at least the 1990s, the Department has applied the water supply restoration provisions of Section 4.2(f) of the SMCRA to all activities associated with the construction of the entire mine opening because the activities are included in the definition of surface mining activity. Requiring all mine opening construction blasting to comply with the SMCRA’s requirements for the use of explosives is consistent with the General Assembly’s stated purposes for adopting the 1980 amendments to the SMCRA and consistent with the Department’s previous application of the law with respect to water supply replacement.

Both SMCRA and NCSMCRA include provisions providing for the safety of the workers. Both acts specifically include safety in the purposes of the Acts. One of the purposes of this final rulemaking is to eliminate the confusion caused by the overlapping jurisdiction of the SMCRA and the Commonwealth's mine safety laws. These mine safety laws apply to work in underground mines, including the construction of the opening to the surface, solely for the purpose of protecting the miners. There is nothing in the Commonwealth's mine safety laws expressing a legislative intent for these laws to have exclusive jurisdiction over the construction of mine openings.

The construction of mine openings, including the use of explosives, from the surface to the coal seam is a surface mining activity subject to the SMCRA. The SMCRA expressly directs the Board to promulgate regulations addressing the certification of blasters. *See*, § 1396.4b(b) (relating to General rulemaking: health and safety).

Comment

Will the proposed regulations increase operator's costs and reduce their flexibility in conducting mine opening blasting? Commentators No. 1 and 2.

Response

This rule making does not impose any additional costs on the regulated community. 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 give the operator greater flexibility in scheduling mine opening blasting, and the requirements for precautions to be taken when blasting is in proximity to a public road.

Comment

This rulemaking establishes regulations that exceed federal standards without complying with the requirements of Executive Order 1996-1. Commentator No. 1.

Response

The Department disagrees. 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.

2. §§ 77.564(b), 87.127(a), and 88.135(a).

Comment

The term “blast” as used in these sections is unclear and should be defined or cross-referenced. Commentator No. 2.

Response

The Department agrees. The term “blast” has been defined as “a detonation of explosives.” The term “blasting” has been defined as “the detonation of explosives.”

Comment

What criteria and process will be used to determine if unscheduled blasting is necessary to maintain the mine opening’s stability? Commentator No. 2.

Response

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 e.g.* § 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.

Comment

The regulation should 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. Commentator No. 2

Response

The Department disagrees. The regulations provide vibration limits that, if adhered to, ensure that damage will not occur to buildings or other structures. *See e.g.* § 77.564(f) and (i) (relating to surface blasting requirements). The Department views this written consent as a civil agreement between the permittee and the owner of the building, and if applicable, the lessee. Each party involved is responsible for ensuring that their interests are met. Nonetheless, the Department cannot evaluate the appropriateness of a request for alternative vibration limits unless the consent is clear and specific.

Comment

The Department should also consider developing a standard consent form. Commentator No. 2.

Response

The Department does not believe that it is appropriate to use the regulations to develop forms. If necessary, this issue will be addressed through technical guidance. Presently, there is no need for such technical guidance. The Department has been granting waivers of vibration limits for some surface mining blasting since 1991. The written consents supporting these waivers have been clear, specific and uncomplicated. Therefore, at this time, the Department does not believe a standard form is needed.

Comment

Does consent to less stringent vibration limitations negate insurance coverage?
Commentator No. 2

Response

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.

Comment

Who can the owner, or if applicable, the lessee contact if they have questions concerning the information submitted by the operator? Commentator No. 2.

Response

Department staff is always available to explain the regulatory requirements and process. However, the owner, and if applicable the lessee, should seek private counsel for assistance in determining whether to accept the operator's request for a consent to alternative vibration limits.

3. §§ 77.564(c) and 87.127(b)

Comment

The term "vibration limits" should be rephrased to be "ground or air vibration limits" to be consistent with the explanation in the Preamble. Commentator No. 2.

Response

Agreed. The term "vibration limits" does not provide as much clarity as specifying ground vibration and airblast when referring to the vibration effects resulting from blasting.

Comment

Why is it no longer necessary to consider excessive noise as the basis for further restrictions on blasting? Commentator No. 2.

Response

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”.

4. §§ 87.127(f)(1) and 88.135(f)(1).

Comment

The operator’s request to use alternative measures and the Department’s approval should be in writing. Commentator No. 2

Response

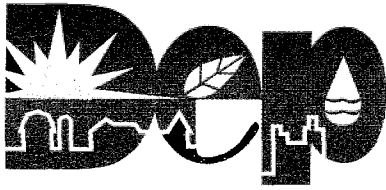
The operator’s request to use alternative measures and the Department’s response are in writing. A request to use alternative measures must be part of the blast plan. *See e.g.* § 87.64 (relating to blasting plan). The Department’s decision to approve, deny or modify a proposed blast plan is a permitting decision, which must be in writing.

Comment

Are local governments or residents to be given notice and the opportunity to participate in this decision? Commentator No. 2

Response

Since the blast plan is part of the mining permit, 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.



Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building
P.O. Box 2063
Harrisburg, PA 17105-2063
May 15, 2008

Policy Office

717-783-8727

Kim Kaufman, Executive Director
Independent Regulatory Review Commission
333 Market Street, 14th Floor
Harrisburg, PA 17120

Re: Final-Form Rulemaking – Surface Mining (#7-414)
Final-Form Rulemaking – Mine Opening Blasting (#7-400)
Final-Form Rulemaking – Stream Redesignations (Big Brook, et al) (#7-410)

Dear Mr. Kaufmann:

Pursuant to Section 5.1(a) of the Regulatory Review Act, please find enclosed copies of three final-form rulemakings for review and comment by the Independent Regulatory Review Commission. The Environmental Quality Board (EQB) approved these final-form rulemakings at its April 15, 2008, meeting.

The Surface Mining final-form rulemaking updates the safety requirements in *25 Pa Code*, Chapter 209 (relating to coal mines) by rescinding and renaming the chapter to 209A Surface Mining and adopting by reference select safety standards from the U.S. Department of Labor, Mine Safety and Health Administration (MSHA) regulations at 30 CFR Parts 56 and 77. The current provisions of Chapter 209, Subchapter A (relating to general safety in bituminous coal strip mines) are antiquated and differ from safety requirements established by MSHA. This difference in standards is a source of conflict and jeopardizes safety at bituminous surface mines. Other than for blasting, there are no Department safety regulations for anthracite surface mines. The provisions of Chapter 209, Subchapter B (relating to explosives in anthracite strip mines) are also out of date and redundant since applicable provisions are found in *25 Pa Code*, Chapter 88 (relating to anthracite mines) and *25 Pa Code*, Chapter 211 (relating to the use, storage and handling of explosives). There are no Department regulations specifying safety standards for surface industrial mineral mines. By adopting the MSHA standards, the Department's safety standards are modernized and additional costs on operators are minimized.

The proposed rulemaking was published in the *Pennsylvania Bulletin* on September 1, 2007. During the 30-day public comment period, Essroc Cement Corporation and the Independent Regulatory Review Commission submitted comments to the EQB. Their comments resulted in modifications to the proposal, which are included in the final form rulemaking. On January 10, 2008, the Mining and Reclamation Advisory Board (MRAB) reviewed and approved the final rulemaking package.



The Mine Opening Blasting final-form rulemaking includes amendments to clarify 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 subject to the applicable requirements in 25 *Pa Code*, Chapter 77, Chapter 87, or Chapter 88 and that the person conducting the blasting activity shall possess a blaster's license. In addition, the rulemaking also includes amendments that will make the scheduling requirements for the use of explosives for constructing openings for coal and industrial mineral underground mines 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. Finally, a category for mine opening blasting is being added to the classifications of blaster's licenses. These final-form regulations are more stringent than the federal regulations because the federal regulations only apply to the initial blasts for mine opening blasting. The risks and nuisances to persons and property near mine opening blasting constitute a compelling need for these regulations.

The proposed regulations were published in the *Pennsylvania Bulletin* on September 2, 2006, at 36 *Pa.B.* 5608, commencing a 30-day public comment period. The EQB received comments on the proposal from the Pennsylvania Coal Association and the Independent Regulatory Review Commission. These commentators raised two main issues concerning the need to apply the surface coal mine blasting regulations to all mine opening blasting and the statutory authority for such activity. In response, the Department maintains that all activities related to the construction of the entire mine opening is surface mining activity regulated by the Surface Mining Conservation and Reclamation Act (SMCRA) and the Noncoal Surface Mining Conservation and Reclamation Act (NCSMCRA).

MRAB considered the final rulemaking at its January 24, 2007, meeting, where the Board discussed the Department's regulatory authority over blasting associated with the construction of the entire mine shaft. The members of the MRAB voted to not endorse the final regulation as a number of members believe that mine opening blasting down to the coal seam is not surface mining activity. Although the Department appreciates the advice of the MRAB, the Department wishes to proceed with the final rulemaking.

The Big Brook, et al Stream Redesignation final-form rulemaking includes amendments to 25 *Pa Code*, Chapter 93 for the redesignation of eight streams, of which five were evaluated in response to rulemaking petitions submitted to the EQB, including Big Brook (Lebanon Township Board of Supervisors; Wayne County), Brooke Evans Creek (Larry Piasecki; Montgomery County), Wissahickon Creek (Upper Gwynedd Township; Montgomery County), Furnace Run (Conestoga Valley High School students, Lancaster County), Clarion River (Iron Furnace Chapter of Trout Unlimited, the Alliance for Wetlands and Wildlife, the Commissioners of Clarion County, and Reliant Energy Mid-Atlantic Power Holding LLC). The three additional streams that are a part of this rulemaking were evaluated based upon Department staff recommendations and include Beaver Creek (Chester County), Mill Creek (Berks County), and Stone Creek (Bedford County).

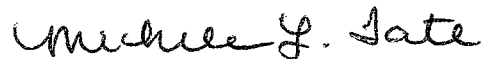
The regulatory changes included in this final rulemaking are the result of aquatic studies conducted by the Department. The physical, chemical, and biological characteristics and other information on these water bodies were evaluated to determine the appropriateness of the current and requested designations using applicable regulatory criteria and definitions. In reviewing whether waterbodies qualify as HQ or EV waters, the Department considered the criteria in 25 *Pa Code*,

Section 93.4b (relating to qualifying as High Quality or Exceptional Value Waters). No changes were made to the redesignations that were contained in the proposed rulemaking.

The proposed rulemaking was published in the *Pennsylvania Bulletin* on May 12, 2007 (37 Pa.B. 2190). During the 45-day public comment period on the proposed rulemaking, the Department received comments from 2 commentators, including the U.S. EPA, Region 3 and the Upper Gwynedd Township, which are addressed in the Comment and Response document, which accompanies the final rulemaking.

The Department will provide assistance as necessary to facilitate the Commission's review of these final-form rulemakings under Section 5.1(e) of the Regulatory Review Act. Please contact me at the number listed on the letterhead if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink that reads "Michele L. Tate". The signature is written in a cursive, flowing style.

Michele L. Tate
Regulatory Coordinator

Enclosures



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF POLICY

TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO
THE REGULATORY REVIEW ACT

I.D. NUMBER: 7- 400

SUBJECT: Mine Opening Blasting

AGENCY: DEPARTMENT OF ENVIRONMENTAL PROTECTION

TYPE OF REGULATION

- ☐ Proposed Regulation
- ☒ Final Regulation
- ☐ Final Regulation with Notice of Proposed Rulemaking Omitted
- ☐ 120-day Emergency Certification of the Attorney General
- ☐ 120-day Emergency Certification of the Governor
- ☐ Delivery of Tolled Regulation
- a. ☐ With Revisions b. ☐ Without Revisions

INDEPENDENT REGULATORY
REVIEW COMMISSION

2008 MAY 15 PM 2:43

RECEIVED

FILING OF REGULATION

DATE

SIGNATURE

DESIGNATION

5-15-08

[Signature]

Majority Chair, HOUSE COMMITTEE ON
ENVIRONMENTAL RESOURCES & ENERGY

5/15/08

[Signature]

Minority Chair, HOUSE COMMITTEE ON
ENVIRONMENTAL RESOURCES & ENERGY

5-15-08

[Signature]

Majority Chair, SENATE COMMITTEE ON
ENVIRONMENTAL RESOURCES & ENERGY

5-15-08

[Signature]

Minority Chair, SENATE COMMITTEE ON
ENVIRONMENTAL RESOURCES & ENERGY

5/15/08

[Signature]

INDEPENDENT REGULATORY REVIEW COMMISSION

ATTORNEY GENERAL (for Final Omitted only)

LEGISLATIVE REFERENCE BUREAU (for Proposed only)

