

Regulatory Analysis Form

(Completed by Promulgating Agency)

**INDEPENDENT REGULATORY
REVIEW COMMISSION**

(All Comments submitted on this regulation will appear on IRRC's website)

(1) Agency: Department of Environmental Protection

(2) Agency Number:
Identification Number: 7-522

IRRC Number: 3138

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(3) PA Code Cite: 25 Pa. Code Chapters 210 & 211

(4) Short Title: Handling and Use of Explosives

(5) Agency Contacts (List Telephone Number and Email Address):

Primary Contact: Laura Edinger, 783-8727, ledinger@pa.gov

Secondary Contact: Jessica Shirley 783-8727, jessshirley@pa.gov

(6) Type of Rulemaking (check applicable box):

Proposed Regulation

Final Regulation

Final Omitted Regulation

Emergency Certification Regulation;

Certification by the Governor

Certification by the Attorney General

(7) Briefly explain the regulation in clear and nontechnical language. (100 words or less)

The rulemaking revises regulations to address the use of explosives for seismic exploration. While permits are currently required for this activity, a supplement to the Department's blasting activity permit application form is necessary, because detailed information is needed for site security and regulatory compliance. This seismic supplement form provides the applicant an opportunity to provide the detailed information. The specifications for this additional information are included in this rulemaking. The rulemaking also updates explosives use requirements, and eliminates antiquated requirements. The updated requirements will result in more consistency between the requirements for construction blasting and blasting for mining operations.

(8) State the statutory authority for the regulation. Include specific statutory citation.

This rulemaking is promulgated under the authority of Sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P. S. §§ 510-17 & 510-20); Sections 7 and 11 of the act of July 1, 1937 (P. L. 2681, No. 537) (73 P. S. §§ 157 & 161); Section 3 and 4 of the act of July 10, 1957 (P. L. 685, No. 362) (73 P. S. § 166 and 167); Reorganization Plan No. 8 of 1981 (71 P. S. § 751-35) (transferring powers and duties conferred under 1937 and 1957 explosives acts from Department of Labor and Industry to Department of Environmental Resources); Section 2(f) of the act of May 18, 1937 (43 P.S. § 25-2(f)) (general workplace safety law regarding "pits, quarries, [noncoal mines], trenches, excavations, and similar operations"); Reorganization Plan No. 2 of 1975 (71 P. S. § 751-22) (transferring powers and duties conferred under 1937 workplace safety law regarding pits, quarries, etc., from Department of Labor and Industry to Department of Environmental Resources); Section 4.2 of the Surface Mining

Conservation and Reclamation Act (52 P. S. § 1396.4b); and Section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P. S. § 3311(e)).

More specifically, regarding the storage and handling of explosives, Section 11 of the act of July 1, 1937 (P. L. 2681, No. 537) (the “1937 Explosives Act”) provides:

For the purpose of carrying out the provisions of this act and applying these provisions to specific cases, the Department of Labor and Industry shall have the power, and its duties shall be, to make, alter, amend, or repeal general rules and regulations to provide protection in the manufacture, processing, transportation, storage, use, or handling of explosives.

Similarly, regarding blasting, Section 4 of the act of July 10, 1957 (P. L. 685, No. 362) (the “1957 Explosives Act”) provides that “the Department of Labor and Industry may promulgate additional rules or regulations it deems necessary not inconsistent with law to effectuate the provisions of this act.” Moreover, the Environmental Quality Board (EQB) is given broad rulemaking authority under Section 1920-A of the Administrative Code of 1929 (71 P. S. § 510-20). Section 1920-A(a) provides:

The Environmental Quality Board shall have the power and its duties shall be to formulate, adopt and promulgate such rules and regulations as may be determined by the board for the proper performance of the work of the department, and such rules and regulations, when made by the board, shall become the rules and regulations of the department.

Section 1920-A(b) vests in the EQB rulemaking authority previously granted to other departments under enumerated statutes, including authority vested in the Department of Labor and Industry under the Explosives Acts. 71 P.S. § 510-20(b); *see also* 71 P.S. § 510-1(24).

(9) Is the regulation mandated by any federal or state law or court order, or federal regulation? Are there any relevant state or federal court decisions? If yes, cite the specific law, case or regulation as well as, any deadlines for action.

The rulemaking is not mandated by any federal or state law.

(10) State why the regulation is needed. Explain the compelling public interest that justifies the regulation. Describe who will benefit from the regulation. Quantify the benefits as completely as possible and approximate the number of people who will benefit.

This regulation will improve public safety and provide consistency in the regulation of various blasting activities. All of the citizens of the Commonwealth will benefit through the enhancement of public safety.

The rulemaking addresses blasting activities for seismic exploration. While permits are currently required for this activity, a supplement to the Department's blasting activity permit application form is necessary because detailed information is needed for site security and regulatory compliance. The Department's current seismic supplement form provides the applicant an opportunity to provide the detailed

information. This rulemaking specifies by regulation what additional information a seismic operation must provide. For example, it is often necessary for explosive charges to remain in the ground for extended periods of time—this rule specifies the security measures needed to protect the public safety under these circumstances. The rulemaking will codify requirements, providing certainty to the regulated community regarding the regulatory framework for seismic exploration.

The rulemaking also updates explosives use requirements to reflect current practices and eliminates outdated requirements. For example, current regulations require permits to purchase explosives and permits to sell explosives to provide tracking for explosives transactions. The Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) has a robust system to do the same. The state requirement is outdated and no longer needed since it is duplicative of the ATF's tracking.

The updated requirements will result in more consistency between the requirements for construction blasting and blasting for mining operations.

(11) 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 regulations.

There are few provisions more stringent than Federal regulations because Pennsylvania has a broader scope in protecting effects that happen off of a particular job site. For instance, the definition of “blast area” differs from the Mine Safety and Health Administration (MSHA) definition because Pennsylvania's regulations apply to effects off of the mine site as well as on it. Generally, the regulation requires compliance with Federal ATF requirements, including background checks and Federal approvals, at 18 U.S.C. Chapter 40 and implementing regulations at 27 CFR Part 555, in order to possess or use explosives in Pennsylvania. See Sections 210.13(b) and 211.103(d)(3). The final-form rulemaking also cites additional relevant Federal regulations, such as requirements from the Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA), where necessary. See Section 211.155(7) (relating to posting) and 211.117 (relating to magazine transaction summary).

(12) How does this regulation compare with those of the other states? How will this affect Pennsylvania's ability to compete with other states?

To the extent the final-form rulemaking addresses blasting activities related to seismic exploration, the regulation of such activities in other states is highly variable. States such as Virginia, Mississippi, Montana and Louisiana have robust codified statutes and regulations; Maryland proposed regulations in November 2016 as part of its update of its regulations pertaining to oil and gas development; and states such as Ohio, West Virginia, New York have no regulatory system for such activities. However, the final-form rulemaking related to seismic exploration is consistent with industry best practices, including measures for improving public safety, and therefore does not hamper Pennsylvania's ability to compete with other states who lack such regulations.

The same analysis applies to the portions of the final-form rulemaking that eliminate antiquated requirements in favor of up-to-date requirements that are consistent with industry practices and are in the best interest of public safety.

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

The mining regulations in Chapters 77 and 86 require compliance with Chapters 210 and 211. The revisions to the explosives regulations will bring consistency to the use of explosives whether it is for mining, construction or other purposes.

(14) Describe the communications with and solicitation of input from the public, any advisory council/group, small businesses and groups representing small businesses in the development and drafting of the regulation. List the specific persons and/or groups who were involved. ("Small business" is defined in Section 3 of the Regulatory Review Act, Act 76 of 2012.)

The Department reviewed both the proposed and final-form rulemaking with the Mining and Reclamation Advisory Board and the Aggregate Advisory Board since the mining regulations require compliance with Chapters 210 and 211. Outreach with the broader explosives regulated community was accomplished through presentations to the Pennsylvania chapters of the International Society of Explosives Engineers and the trade group representing the seismic exploration contractors. Informal discussions were also held with individual stakeholders.

Several commentators provided comments about the proposed revisions to the fee schedule and proposed Subchapter J (relating to Civil Penalties). After careful consideration, the Department has removed the proposed revisions to the fee schedule and proposed Subchapter J from this rulemaking. Civil penalties for non-mining explosives violations and any revisions to the existing fee schedule will be addressed separately in subsequent rulemaking.

(15) Identify the types and number of persons, businesses, small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012) and organizations which will be affected by the regulation. How are they affected?

There are about 2,000 individual licensed blasters in Pennsylvania. The bulk of the activity in Pennsylvania is conducted by large corporations, including several multinational corporations. However, the regulated community is comprised of about 450 businesses, most of which are small businesses that will be subject to this regulation. The regulations will apply consistently among all operations for small and large businesses alike because the effects of blasting are the same regardless of who is conducting it.

(16) List the persons, groups or entities, including small businesses, that will be required to comply with the regulation. Approximate the number that will be required to comply.

There are about 450 companies storing explosives or conducting blasting operations in Pennsylvania that will be subject to this regulation. There are about 2,000 individual licensed blasters in Pennsylvania who will be required to comply.

(17) Identify the financial, economic and social impact of the regulation on individuals, small businesses, businesses and labor communities and other public and private organizations. Evaluate the benefits expected as a result of the regulation.

This final-form rulemaking is not expected to have a significant financial impact on individuals, small businesses, businesses and labor communities, or other public and private organizations in the regulated community. The final-form rulemaking includes more clarity, efficiency and transparency regarding the regulation of blasting operations. For instance, persons selling or purchasing explosives will no longer have to acquire a state permit or fulfill state requirements to track their transactions that are duplicative of

federal ATF requirements. These improvements to the regulations will improve public safety while also providing cost-savings to the regulated community.

(18) Explain how the benefits of the regulation outweigh any cost and adverse effects.

The final-form rulemaking eliminates many antiquated and duplicative regulatory requirements while improving public safety. Any additional compliance costs that might exceed efficiencies gained by the updated regulations would result from site-specific factors that implicate public safety concerns. These potential costs are highly unpredictable and are outweighed by the enhancement to public safety.

(19) 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. Explain how the dollar estimates were derived.

The final-form rulemaking will likely result in a cost-savings to the regulated community, predominantly from the elimination of antiquated requirements, elimination of requirements that are duplicative of federal ATF regulations and are therefore unnecessary, and adoption of requirements that are up-to-date with industry best practices. The Department estimates that the the regulated community and the Commonwealth each will save approximately \$10,000.00 per year through these efficiencies, particularly the elimination of the duplicative requirements to obtain a state permit to buy or sell explosives, and requirements to track such transactions.

The regulated community is already familiar with the technical aspects of the final-form rulemaking and will not likely incur legal, accounting, or consulting costs as a result of this rulemaking. The final-form rulemaking may increase certain costs of compliance on a site-specific basis where public safety concerns are present. However, these potential compliance costs would be highly variable and difficult to predict for the purposes of providing an estimate.

(20) Provide a specific estimate of the costs and/or savings to the **local governments** associated with compliance, including any legal, accounting or consulting procedures which may be required. Explain how the dollar estimates were derived.

This regulation will have a minimal impact to local governments. There are a few municipalities that are licensed to store explosives, typically for bomb squads.

(21) Provide a specific estimate of the costs and/or savings to the **state government** associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required. Explain how the dollar estimates were derived.

There are no known additional costs to the state government.

(22) For each of the groups and entities identified in items (19)-(21) above, submit a statement of legal, accounting or consulting procedures and additional reporting, recordkeeping or other paperwork, including copies of forms or reports, which will be required for implementation of the regulation and an explanation of measures which have been taken to minimize these requirements.

It is not anticipated that the additional reporting, recordkeeping or other paperwork will be substantial because the existing requirements are being clarified. Some additional data will need to be reported but it can accompany the reports that are currently required. It will be necessary to revise some of the forms that are used.

(22a) Are forms required for implementation of the regulation?

A new form for blasting related to seismic exploration will be developed based on the final regulatory requirements. It is anticipated that this form will be similar to the supplement currently used.

(22b) If forms are required for implementation of the regulation, **attach copies of the forms here.** If your agency uses electronic forms, provide links to each form or a detailed description of the information required to be reported. **Failure to attach forms, provide links, or provide a detailed description of the information to be reported will constitute a faulty delivery of the regulation.**

Subchapter I of Chapter 211 will be implemented through a new Seismic Exploration Blasting Activity Permit application. It will be based on Subchapter I and will incorporate elements of the Seismic Exploration Blasting Activity Permit (BAP) Supplement, a modified version of which is attached (Attachment 1) at the end of this Regulatory Analysis Form.

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

	Current FY 2017/18	FY +1 2018/19	FY +2 2019/20	FY +3 2020/21	FY +4 2021/22	FY +5 2022/23
SAVINGS:	\$	\$	\$	\$	\$	\$
Regulated Community	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Local Government	\$0	\$0	\$0	\$0	\$0	\$0
State Government	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Total Savings	\$0	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
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

(23a) Provide the past three-year expenditure history for programs affected by the regulation.

Program	FY -3 2014/15	FY -2 2015/16	FY -1 2016/17	Current FY 2017/18
Environmental Protection Operations 160-10381	\$84,438,000	\$87,712,000	\$86,462,000	\$90,841,000
Environmental Program Management 161-10382	\$28,517,000	\$28,277,000	\$26,885,000	\$30,054,000
Noncoal Srf Mng Fund 280-20101	\$2,912,000	\$3,196,000	\$3,594,000	\$4,122,000

(24) For any regulation that may have an adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), provide an economic impact statement that includes the following:

- (a) An identification and estimate of the number of small businesses subject to the regulation.
- (b) The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed regulation, including the type of professional skills necessary for preparation of the report or record.
- (c) A statement of probable effect on impacted small businesses.
- (d) A description of any less intrusive or less costly alternative methods of achieving the purpose of the proposed regulation.

It is estimated that there are 450 small businesses which will be subject to this regulation. This regulation is not expected to have an adverse impact on small businesses. There is no alternative method to accomplish the public safety elements of this rulemaking.

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

No special provisions were developed for this regulation. It is in the interest of all persons in the Commonwealth to have the handling and use of explosives appropriately regulated in order to adequately ensure public safety.

(26) Include a description of any alternative regulatory provisions which have been considered and rejected and a statement that the least burdensome acceptable alternative has been selected.

There were no alternate regulatory provisions considered during the development of the rulemaking. Ultimately, regulatory compliance puts all of the regulated community in the best position to show that there have been no adverse effects resulting from the handling, use or storage of explosives.

(27) In conducting a regulatory flexibility analysis, explain whether regulatory methods were considered that will minimize any adverse impact on small businesses (as defined in Section 3 of the Regulatory Review Act, Act 76 of 2012), including:

- a) The establishment of less stringent compliance or reporting requirements for small businesses;
- b) The establishment of less stringent schedules or deadlines for compliance or reporting requirements for small businesses;
- c) The consolidation or simplification of compliance or reporting requirements for small businesses;
- d) The establishment of performance standards for small businesses to replace design or operational standards required in the regulation; and
- e) The exemption of small businesses from all or any part of the requirements contained in the regulation.

These other regulatory methods were not considered because the impact of blasting is not related to whether it is conducted by a small or large business. Ultimately, regulatory compliance puts all of the regulated community in the best position to show that there have been no adverse effects resulting from the handling, use or storage of explosives.

(28) If data is the basis for this regulation, please provide a description of the data, explain in detail how the data was obtained, and how it meets the acceptability standard for empirical, replicable and testable data that is supported by documentation, statistics, reports, studies or research. Please submit data or supporting materials with the regulatory package. If the material exceeds 50 pages, please provide it in a searchable electronic format or provide a list of citations and internet links that, where possible, can be accessed in a searchable format in lieu of the actual material. If other data was considered but not used, please explain why that data was determined not to be acceptable.

Data is not the basis for this final-form rulemaking.

(29) Include a schedule for review of the regulation including:

- | | |
|---|------------------------|
| A. The length of the public comment period: | <u>30 days</u> |
| B. The date or dates on which any public meetings or hearings will be held: | <u>NA</u> |
| C. The expected date of delivery of the final-form regulation: | <u>Quarter 1, 2018</u> |
| D. The expected effective date of the final-form regulation: | <u>Quarter 2, 2018</u> |
| E. The expected date by which compliance with the final-form regulation will be required: | <u>Quarter 2, 2018</u> |
| F. The expected date by which required permits, licenses or other approvals must be obtained: | <u>Quarter 2, 2018</u> |

(30) Describe the plan developed for evaluating the continuing effectiveness of the regulations after its implementation.

Effectiveness will be gauged through ongoing interaction with the blasting industry, advisory boards and the public. The ultimate test is the prevention of adverse impacts. The primary purpose of Chapters 210 and 211 is to prevent property damage and personal injuries.

DRAFT SEISMIC EXPLORATION BLASTING ACTIVITY PERMIT
SUPPLEMENT

A. REGULATORY REQUIREMENTS FOR THIS ACTIVITY

Seismic exploration activities employing explosives are regulated under Subchapter I of 25 Pa. Code Chapter 211 (25 Pa. Code §§ 211.191 - .194), as well as other provisions of Chapter 211 not otherwise precluded by Subchapter I.

B. IN ADDITION TO THE BLASTING ACTIVITY PERMIT (Form 5600-PM-BMP0021 (Rev. Mo./Yr.)), PROVIDE THE FOLLOWING INFORMATION

(If necessary, provide answers on a separate attachment(s))

1. Please provide the total number of holes proposed to be loaded on this permit.

Number of holes proposed to be loaded with explosives: _____

2. Do you intend to detonate explosives within 300 feet of any dwelling, water supply or other structure?

(a) If yes, please describe where you intend to conduct seismograph monitoring.

3. What is the period of time, in days, between when the explosives are loaded in the ground and when they will be detonated (sleep time) on this permit?

Type of detonators (electric or electronic): _____

Sleep time (days): _____

4. Describe, in detail, how you intend to prevent misfires.

(a) In the event that a misfire occurs, how do you plan to make the site safe?

5. Please explain, in detail, how you intend to supervise, control, and ensure the security and integrity of explosives charges that have been loaded in the ground until those charges are safely detonated. Information submitted should include the frequency and scope of security patrols, method of logging of security patrol

routes and information on the burial of wires or other methods of limiting the accessibility to the explosives charges.

(Submit as an attachment)

6. Please provide a map clearly delineating all of the areas where the placement of explosives charges is planned and the footprint of any mining permits where mining, reclamation or water treatment are occurring, or may occur, within 500 feet of where the placement of explosives charges is planned.

(Submit as an attachment)

7. Please provide detailed information about the explosives to be used, including data sheets and warranty information:

FACE SHEET
FOR FILING DOCUMENTS
WITH THE LEGISLATIVE REFERENCE
BUREAU

(Pursuant to Commonwealth Documents Law)

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DO NOT WRITE IN THIS SPACE

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. 7-522

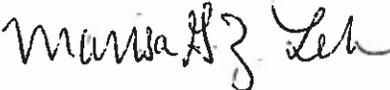
DATE OF ADOPTION FEBRUARY 20, 2018

BY 

TITLE PATRICK MCDONNELL
CHAIRMAN

EXECUTIVE OFFICER CHAIRMAN OR SECRETARY

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

BY 

MAR 08 2018
DATE OF APPROVAL

(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

Handling and Use of Explosives

25 Pa. Code Chapters 210 and 211

**FINAL-FORM RULEMAKING
ENVIRONMENTAL
QUALITY BOARD
[25 PA. CODE CHS. 210 AND 211]
Handling and Use of Explosives**

The Environmental Quality Board (EQB) amends Chapters 210 and 211 (relating to blasters' licenses; and storage, handling and use of explosives) to read as set forth in Annex A. These amendments update the regulations based on current industry best practices and include blasting requirements related to seismic exploration.

This final-form rulemaking was adopted by the Board at its meeting of February 20, 2018.

A. Effective Date

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

B. Contact Persons

For further information, contact Thomas Callaghan, PG, Director, Bureau of Mining Programs, Rachel Carson State Office Building, 5th Floor, 400 Market Street, P. O. Box 8461, Harrisburg, PA 17105-8461, (717) 787-5015; or Joseph Iole, Assistant Counsel, Bureau of Regulatory Counsel, P. O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. This final-form rulemaking is available on the Department of Environmental Protection's (Department) web site at www.dep.state.pa.us (select "Public Participation," then "Environmental Quality Board (EQB)").

C. Statutory Authority

This final-form rulemaking is promulgated under the authority of sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P. S. §§ 510-17 and 510-20), sections 7 and 11 of the act of July 1, 1937 (P. L. 2681, No. 537) (73 P. S. §§ 157 and 161), sections 3 and 4 of the act of July 10, 1957 (P. L. 685, No. 362) (73 P. S. §§ 166 and 167), Reorganization Plan No. 8 of 1981 (71 P. S. § 751-35) (transferring powers and duties conferred under the 1937 and 1957 explosives acts from the Department of Labor and Industry to the Department of Environmental Resources), section 2(f) of the act of May 18, 1937 (P. L. 654, No. 174) (43 P. S. § 25-2(f)), Reorganization Plan No. 2 of 1975 (71 P. S. § 751-22) (transferring powers and duties conferred under the 1937 workplace safety law regarding pits, quarries, and the like, from the Department of Labor and Industry to the Department of Environmental Resources), section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P. S. § 1396.4b) and section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P. S. § 3311(e)).

D. Background and Purpose

The final-form rulemaking amends existing regulations to address the use of explosives for seismic exploration, which is fundamentally different than most other uses of explosives. For example, with seismic exploration, it is often necessary for explosive charges to remain in the ground for extended periods of time. This final-form rulemaking specifies the security measures needed to protect the public safety under these circumstances. While permits are currently required for this activity, a supplement to the Department's blasting activity permit application form is necessary because detailed information is needed for site security and regulatory compliance. The Department developed an interim seismic supplement to address safety issues at seismic exploration sites which provides the applicant an opportunity to provide this detailed information. The specifications for this additional information are included in this final-form rulemaking. The final-form rulemaking codifies these requirements, providing certainty to the regulated community regarding the regulatory framework for seismic exploration.

The final-form rulemaking also updates explosives use requirements to reflect current practices and eliminates outdated requirements. The updated requirements will result in more consistency between the requirements for construction blasting and blasting for mining operations.

Advisory board collaboration and outreach

The Department reviewed the final rulemaking with the Mining and Reclamation Advisory Board (MRAB) on July 21, 2016 and with the Mining Aggregate Advisory Board (MAAB) on November 2, 2016. Each advisory board recommended that the rulemaking move forward for EQB consideration.

In addition to advisory committee engagement, the Department conducted outreach through the trade groups for these industry sectors and with the Pennsylvania chapters of the International Society of Explosives Engineers. As a result of this outreach, no concerns were presented during the public comment period by seismic operators or construction contractors.

E. Summary of Changes to the Proposed Rulemaking

Chapter 210. Blasters' licenses

§ 210.11. Definitions

The final-form rulemaking does not include the proposed addition of definitions of "employee possessor," "explosive materials," and "responsible person." Based on comments, the proposed definitions of "employee possessor" and "responsible person" may not cover all persons who are eligible for a blaster's license. Also, "explosives" is added in the final-form rulemaking based upon comments that the proposed definition of "explosives materials" was inconsistent with the Federal requirements.

§ 210.13. General

Subsection (b) is revised to require present rather than past compliance with Federal requirements to obtain a blaster's license. This change was made based on comments which pointed out that the proposed requirement could be interpreted as a permanent bar for anyone who ever had a violation. Because the Federal requirements referenced in this section include a background check requirement, the final-form rulemaking does not include the proposed separate articulation of that requirement.

Chapter 211. Storage, handling and use of explosives

Subchapter A. General provisions

§ 211.101. Definitions

The final-form rulemaking adds a definition for "at-the-hole communication" based on comments to clarify the nature of the communication required.

The final-form rulemaking has removed the proposed phrase "the potential for" (with regard to personal injury and damage to property) from the definition of "blast area" because the phrase is unnecessary.

A clarifying sentence is added to the new definition of "cube root scaled distance ($D_s^{1/3}$)" to clarify that the cube root scaled distance is used to estimate airblast levels.

The final-form rulemaking does not include the addition of definitions of "employee possessor," "explosive materials," and "responsible person." Based on comments, not all persons who are eligible for a blaster's license may be included as either an employee possessor or responsible person. Also, a definition of "explosives" is added in the final-form rulemaking based upon comments pointing out that the proposed definition of "explosive materials" was inconsistent with the Federal requirements.

The amended definition of "flyrock" does not include material that travels onto property neither owned nor leased by the permittee or its customer, as proposed. The proposed language created a problem for construction blasting because property is rarely owned or leased by the permittee or its customer on construction projects. This revision results in the renumbering of the remaining area identified in the definition of "flyrock."

A definition for "FMCSA inspection" is added to clarify that certain vehicle inspections by the Federal Motor Carrier Safety Administration can be used in Subchapter E (relating to transportation of explosives).

The final-form rulemaking does not include the proposed definition of "nuisance". Commentators noted that the use of this term was ambiguous and could be subject to misinterpretation.

Definitions of the acronyms “MSHA” and “OSHA” were added as these acronyms are used in the regulation.

The final-form rulemaking renames the existing defined term “scaled distance” to be “square root scaled distance.” The definition is also modified to clarify that square root scaled distance is used to estimate ground vibration.

The final-form rulemaking does not include the proposed definitions of “unauthorized detonation of explosives,” “unauthorized handling and use of explosives” and “unauthorized storage of explosives.” based on comments that these definitions could result in unintended consequences for new employees of blasting contractors.

§ 211.103. Enforcement

The final-form rulemaking does not include proposed paragraph (d)(4) that established a permit and license block for any person who did not meet the requirements to be authorized as an employee possessor or responsible person by Federal Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). The terms “employee possessor” and “responsible person” are used in Federal requirements that differ from the terms included in the final-form rulemaking. In addition, not everyone who uses or handles explosives is included as either an employee possessor or responsible person.

Subchapter B. Storage and classification of explosives

§ 211.117. Daily summary of magazine transactions

The final-form rulemaking adds a reference to an additional Federal requirement (27 CFR 555.127) that was inadvertently omitted in the proposed rulemaking.

Subchapter C. Permits

§ 211.121. General requirements

Based on comments, the final-form rulemaking clarifies existing subsection (e) by revising the language relating to compliance to be in the present tense. In addition, the new subsection (f) is clarified to require compliance by the “the blasting contractor” rather than the “all subcontractors” consistent with other sections of the final-form rulemaking.

§ 211.124. Blasting activity permits

Paragraphs (a)(3) is clarified that the application for a blasting activity permit must include the ATF license or permit number of the applicant or the “blasting contractor” rather than the “contract blaster” to be consistent with § 211.121(f).

Paragraph (a)(9) clarifies that an application for a blasting activity permit must include the minimum “square root” scaled distance unless the permit is for demolition blasting operations,

which require use of the cube root scaled distance. Scaled distance is an important planning tool to limit the adverse effects of blasting. Cube root scaled distance is used to plan for the effects of air blast which is the most common impact of demolition blasting.

The final-form rulemaking deletes existing paragraph (a)(17), which was proposed to be renumbered as paragraph (a)(20). This paragraph required an applicant to provide proof that residents within 200 feet of the blasting site were informed of the proposed blasting operation. The proposed rulemaking recommended increasing the distance to 300 feet, or another distance established in the permit. Based upon comments, Department determined that the notification requirement is less effective than other regulatory requirements in ensuring public safety. The existing requirement to clear and secure the blast area is more effective than providing notice prior to application. The requirement to clear and secure the site requires blasters to notify people in the vicinity of the blast as determined by blast design. For instance, if a blaster can only clear and secure a small area, the blast must be designed accordingly.

Subchapter D. Records of disposition of explosives

§ 211.133. Blast reports

Paragraph (a)(9), which was originally paragraph (a)(7), is revised based on comments to clarify the information an applicant must include on the sketch that accompanies the blast record.

Paragraph (a)(19), which was originally paragraph (a)(16), is revised to clarify that the “square root” scaled distance must be included in the blast report, except when demolition blasting occurs. In that case, the blast report must include the cube root scaled distance.

Paragraph (a)(26) is revised to require a blast report to include a drill log which shows the condition of all holes that were drilled for a blast, whether they were loaded or not. Based on comments, the Department determined that limiting the drill log to other bore holes in the blast site “related to the blasting activity” was not appropriate. The condition of all drilled holes is necessary as it provides information regarding the condition and extent of the rock being blasted. This information is important for both the blaster and the Department to evaluate why a blast performed the way it did.

Subchapter E. Transportation of explosives

§ 211.141. General requirements

Paragraph (13) is revised to clarify that blasting activity permittees must only load explosives onto on-road vehicles that have passed the State safety inspection or certification “or FMCSA inspection”, which is an inspection required by the Federal Motor Carrier Safety Administration. Based on comments, an option of using Federal inspection specifications has been added, which particularly offers the regulated community the option of using out-of-state vehicles.

Subchapter F. Blasting activities

§ 211.151. Prevention of damage or injury

Proposed subsection (b) requiring blasting to be conducted in a manner that prevents a nuisance has not been included in the final-form rulemaking. Based on comments, use of the term “nuisance” created ambiguity and would be subject to varied interpretations. The other requirements in this section adequately protect injury to others or damage to property of others, so proposed subsection (b) is not necessary.

Subsections (e) and (f) have been revised to rely on “particle velocity” rather than “peak particle velocity”, as proposed, because the modifier “peak” is not necessary.

§ 211.152. Control of noxious gases, including carbon monoxide and oxides of nitrogen

The heading of this section has been revised to refer to the control of gases, rather than the control of “noxious” gases. Likewise, subsections (a) and (b) have been revised to refer to gases generated by the blast, rather than the generation of “toxic gases.” Commentators objected to the use of the modifiers “noxious” and “toxic” because any gas generated by the blast that affects the health or safety of an individual is prohibited.

§ 211.154. Preparing the blast

Paragraph (o) relating to the posting of signs has been revised to ensure consistency with Federal requirements, specifically 29 CFR 1926.905(p) (relating to loading of explosives or blasting agents; for construction blasting), 30 CFR 77.1303(g) (relating to explosives, handling and use; for blasting at surface coal mines and surface areas of underground coal mines) or 30 CFR 56.6306(a) (relating to loading, blasting and security; for blasting at metal and nonmetal mines), as applicable. Commentators pointed out potential conflicts with Federal regulatory requirements for activities under the jurisdiction of the Mine Safety and Health Administration (MSHA) or the Occupational Health and Safety Administration (OSHA).

Subchapter G. Requirements for monitoring

§ 211.171. General provisions for monitoring

Subsection (a) has been revised to include a reference to square root scaled distance to provide consistency throughout the regulation.

Subchapter J. Civil penalties

Subchapter J has been removed in the final-form rulemaking. Civil penalties for non-mining explosives violations will be addressed in a future rulemaking package.

F. Summary of Comments and Responses on the Proposed Rulemaking

Comments were received from seven public commentators and the Independent Regulatory Review Commission (IRRC).

Several commentators suggested that additional references to the Federal regulations were appropriate in order to provide clarity and consistency. For example, with respect to sign requirements, MSHA has regulations for mine sites and OSHA has regulations for construction blasting. The final-form rulemaking includes references to these requirements in § 211.154(o). The Department initially proposed to add these requirements as a new subsection under § 211.155, but the final-form rulemaking moves these requirements to § 211.154 to make clear that a blaster must comply with them prior to loading a blast, which is consistent with Federal requirements. A reference to ATF regulations was also added in § 211.117. The definition of the term “explosives” in § 211.101 has been revised to include the elements of the ATF definition of “explosives” and items on the ATF “list of explosive materials.” The definition of “blast area” in the final-form rulemaking was not revised to include a reference to the MSHA requirements because they are limited to on-site effects of blasting, while the Commonwealth statutes also address public safety, which requires consideration of off-site effects as well.

A revision to the definition of “mine opening blasting” in § 210.11 was suggested, but not made at this time as additional review is necessary. The suggestion to delete § 210.17(a) in its entirety was made, but this section has been retained as it explains the scope of blaster’s licenses issued by the Department. A commentator suggested removing § 211.115 since this is covered by Federal regulations. Retention of this section is necessary, however, to provide the Department with the authority to implement the existing explosives storage security measures.

Several commentators indicated that the fee increases were excessive. The existing fees have been in place for many years and do not reflect current administrative and enforcement costs. However, after careful consideration, the Department has removed the proposed fee schedule revisions. The Department will further evaluate the fee schedule and will address fees separately in a subsequent rulemaking.

A commentator took exception to the addition of the phrase “the potential for” in the definition of “blast area” in § 211.101 stating that it is inconsistent with Federal requirements and ambiguous. This phrase is not included in the final-form rulemaking. A commentator stated that the addition of the area of “property neither owned nor leased by the permittee or its customer,” to the definition of flyrock in § 211.101 created a conflict of property rights, without providing any additional protection. After further review, this portion of the definition of flyrock has been deleted in the final-form rulemaking.

A commentator requested clarification of the difference between the terms “blaster” and “blaster-in-charge” in §§ 211.121 and 211.124. While blaster is a generic term, blaster-in-charge is used exclusively in relation to the detonation of a blast and the associated record keeping. This distinction is necessary. Multiple licensed blasters may be involved with a blast, but each blast has only one blaster-in-charge in order to assure accountability.

A commentator stated that the use of the term scaled distance was unclear because of the introduction of the definition of “cube root scaled distance” in § 211.101. The final-form rulemaking has been revised to include the distinction between square root scaled distance and cube root scaled distance in each instance where scaled distance is used. The existing term “scaled distance” has been replaced with “square root scaled distance” and clarifying statements have been added to both definitions.

A commentator suggested the removal of the definitions for “unauthorized detonation of explosives”, “unauthorized handling and use of explosives” and “unauthorized storage of explosives” stating that they were unreasonable and impossible to enforce. After further consideration and review, these terms and references to them have been deleted from the final-form rulemaking.

A commentator requested clarification of the applicability of the permit and license block in § 211.121. This section has been clarified by using the present tense.

A commentator objected to the four-hour availability for access to explosives storage magazines at subsection 211.115 (j). Since the rulemaking allows for an alternative time frame, this subsection was not revised.

A commentator objected to the addition of § 211.116 (relating to decommissioning magazines), asserting that it is not necessary due to similar Federal requirements. The Department’s inspectors provide confirmation that magazines have been emptied as part of the Commonwealth’s explosives storage magazine licensing responsibility. For this reason, the section was kept in the final-form rulemaking.

Commentators requested clarifications about permitting requirements under § 211.124 (relating to blasting activity permits). More specifically, questions were raised about electronic submissions, dealing with multiple blasts under one permit application, specifying the types of explosives, fee payments, addresses and mapping. Specific clarifications are noted as follows. Electronic signatures are acceptable under existing electronic commerce requirements. Blasting permits routinely are designed for multiple blasts. The requirement to provide the specific types of explosives to be used is intended to capture enough detail for planning, but does not require identification of brand names. While the Department has removed the proposed revisions to the fee schedule, the Department will continue to collect existing fees consistent with currently accepted methods of payment. Addresses and mapping need to provide sufficient information in order to locate blasts and structures that may be affected by blasting.

A commentator stated that the proposed notification of residents within 300 feet of the blast site to be included as part of a permit application does not provide any benefit and is arbitrary because the 300-foot distance does not consider the scale of each blasting project. After further consideration, the notification requirement was deleted from the final-form rulemaking because the notification requirement is less effective than other regulatory requirements in ensuring public safety. The existing requirement to clear and secure the blast area is more effective than providing notice prior to application. The requirement to clear and secure the site requires

blasters to notify people in the vicinity of the blast as determined by blast design. For instance, if a blaster can only clear and secure a small area, the blast must be designed accordingly.

A commentator stated that a blaster's license for law enforcement is no different than other uses of explosives. With the addition of the law enforcement category in § 210.17(a), the Department will be able to tailor the required certification class and exam to the law enforcement category.

Several comments were received about the blast record requirements specified in § 211.133. These are related to electronic signatures, the description of the ground in the area of the blasting, the amount of explosives in each hole, addresses, and drill logs. The final-form rulemaking does not address electronic signatures because they are allowed under existing electronic commerce requirements. Clarity has been added to the description of the ground by providing examples. The reporting of the amount of explosives in each hole is necessary to meet the general requirement of having enough information to reconstruct the blast. For bulk products with variable densities, a density range will meet the requirements under paragraph (a)(14). The new requirement provides specific direction on how to comply. Addresses are needed to confirm locations. The drill logs are also necessary to meet the general requirement of having enough information to reconstruct the blast.

A commentator suggested that a definition should be added to clarify that at-the-hole communication with the driller is an effective way for the blaster-in-charge to determine the condition of the material to be blasted. A definition for "at-the-hole communication" has been added in § 211.101.

A commentator noted that out-of-state vehicles are not subject to the Commonwealth's inspection requirements. In response, the final-form rulemaking includes a definition of "FMCSA inspection" in § 211.101 and a reference to the Federal vehicle inspection requirement in § 211.141.

Several commentators suggested that the term nuisance is ambiguous and subject to varied interpretations. Therefore, this term has not been included in the final-form rulemaking.

A commentator suggested that provisions be made for alternative peak particle velocity limits. The final form rulemaking provides for alternative particle velocity levels in § 211.151(e).

Several commentators objected to the terms "noxious" and "toxic" in § 211.152 in relation to the gases produced by a blast. After further review, the final-form rulemaking was revised to eliminate these words, as the language included in this section prohibits the generation of any gas by a blast that affects the health or safety of an individual.

Several commentators noted potential conflicts with Federal regulatory requirements for activities under the jurisdiction of MSHA or OSHA. The final-form rulemaking includes references to the Federal requirements, when appropriate, to avoid any conflicts.

A commentator suggested that a reference be added to manufacturer specifications for deploying seismographs to monitor a blast. A reference to International Society of Explosives Engineers

standards is included in § 211.171(e), as proposed, and is sufficient to account for manufacturer specifications.

A commentator questioned the authority of the Board to establish a civil penalty program, when it is not explicitly authorized by the explosives statutes. The Board has rulemaking authority under Section 1920-A of the Administrative Code of 1929 (71 P. S. § 510-20) to adopt rules and regulations for the proper performance of work by the Department, including authority to adopt rules and regulations authorized under sections 7 and 11 of the act of July 1, 1937 (P. L. 2681, No. 537) (73 P. S. §§ 157 and 161) and sections 3 and 4 of the act of July 10, 1957 (P. L. 685, No. 362) (73 P.S. §§ 166 and 167) (collectively, the Explosives Acts). The statutory provisions authorize regulations necessary to effectuate the provisions of the acts that are not inconsistent with law. Upon further review, the Board, however, has determined that it would be more appropriate to implement a civil penalty program for non-mining blasting violations separately through a future rulemaking.

Several commentators provided feedback about specific requirements in the proposed civil penalty system. A commentator observed that the concept of “interference with a person’s right to the comfortable enjoyment of life or property” is subjective and cannot be consistently enforced. Commentators requested clarification about how civil penalty will be assessed under proposed § 211.204, and specifically how the cost to the Commonwealth will be determined under proposed § 211.204(b)(4), which is also an element of the existing civil penalty program for mining violations. These comments will be taken into account in the development of a separate future regulation to address civil penalties for non-mining explosives violations.

G. Benefits, Costs and Compliance

This final-form rulemaking updates the existing regulatory framework regarding blasting and explosives. The amendments will increase the cost of compliance, but provide more certainty to the regulated community with regard to operational requirements. The benefit to the public from improved public safety and documentation of blasting activities will outweigh the costs of compliance.

Benefits

This final-form rulemaking will improve public safety, provide consistency and clarity to the regulated community. All of the citizens of the Commonwealth will benefit through the enhancement of public safety.

The final-form rulemaking addresses blasting activities related to seismic exploration. While permits are currently required for this activity, a supplement to the Department's blasting activity permit application form is necessary because detailed information is needed for site security and regulatory compliance. This seismic supplement form provides the applicant an opportunity to provide the detailed information. For example, it is often necessary for explosive charges to remain in the ground for extended periods of time—this rule specifies the security measures needed to protect the public safety under these circumstances. The rulemaking will codify

requirements, increasing public safety and providing certainty to the regulated community regarding the regulatory framework for seismic exploration.

The final-form rulemaking also updates explosives use requirements to reflect current practices, eliminates outdated requirements and provides a more effective enforcement mechanism. For example, current regulations require permits to purchase explosives and permits to sell explosives to provide tracking for explosives transactions. The Federal ATF has a robust system to do the same. The state requirement is outdated and no longer needed since it is duplicative of the ATF's tracking. The updated requirements will result in more consistency between the requirements for construction blasting and blasting for mining operations.

Compliance costs

The proposed rulemaking was expected to result in increased costs, specifically due to new or increased fees. However, after careful consideration, the Department has removed the proposed fee schedule revisions to re-evaluate the fees and addressed necessary changes separately in a subsequent rulemaking.

The additional improvements and clarifications in the final-form rulemaking are not expected to significantly increase costs and should in some instances provide a cost savings to the regulated community. Removing the state permitting requirement for the sale and purchase of explosives, as well as requirements to track those transactions, will result in a cost savings for the regulated community. Any additional compliance costs that may result from site-specific factors that raise public safety concerns are highly variable and difficult to predict.

Compliance Assistance Plan

Compliance with the final-form rulemaking is expected to be seamless since many of the more stringent requirements are in place through permitting or are incremental changes to the existing requirements. Compliance assistance for this final-form rulemaking will be provided through routine interaction with trade groups and individual applicants.

Paperwork requirements

This final-form rulemaking requires additional information as part of a permit application for blasting related to seismic exploration. The additional requirements are more focused and clarify the current requirements. Other existing forms may need updating to reflect citation changes, but this change does not increase paperwork requirements on the regulated community. The final-form rulemaking also requires that the regulated community make certain Federally-required records available for Department inspection – this requirement does not add any additional paperwork on the regulated community that is not otherwise required by federal law.

H. Pollution Prevention

The Pollution Prevention Act of 1990 (42 U.S.C.A. §§ 13101—13109) established a National policy that promotes pollution prevention as the preferred means for achieving state

environmental protection goals. The Department encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally friendly materials, more efficient use of raw materials and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance. This final-form rulemaking has minimal impact on pollution prevention since it is focused on public safety.

I. Sunset Review

The Board is not establishing a sunset date for these regulations, since they are needed for the Department to carry out its statutory authority. The Department will continue to closely monitor these regulations for their effectiveness and recommend updates to the Board as necessary.

J. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on February 17, 2016, the Department submitted a copy of this proposed rulemaking, published at 46 Pa.B. 996 (February 27, 2016), to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House and Senate Environmental Resources and Energy Committees, for review and comment.

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

Under section 5.1(j.2) of the Regulatory Review Act (71 P. S. § 745.5a(j.2)), on _____, the final-form rulemaking was deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on _____, and approved the final-form rulemaking.

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 46 Pa.B. 996 (February 27, 2016).

(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:

(1) The regulations of the Department, 25 Pa. Code Chapters 210 and 211, are amended by adding §§ 211.116, 211.17, 211.191—211.194, and amending §§ 210.11, 210.13, 210.16, 210.17, 210.19, 211.101—211.103, 211.112, 211.15, 211.121—211.125, 211.131—211.133, 211.141, 211.151, 211.152, 211.154, 211.155, 211.158, 211.171, 211.172, 211.182 to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.

(2) The Chairman 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.

(3) The Chairman shall submit this order and Annex A to IRRC and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act (71 P.S. §§ 745.1—745.14).

(4) The Chairman of the Board shall certify this order and Annex A, as approved for legality and form, and deposit them with the Legislative Reference Bureau, as required by law.

(5) This order shall take effect immediately.

Patrick McDonnell,
Chairperson

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 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:

ATF—The United States Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives.

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.

~~**Employee possessor**—An individual who is in possession of or has control of explosives materials.~~

~~**Explosive materials**—Any material classified as an explosive by the ATF in its most current list published in the *Federal Register* under 18 U.S.C.A. § 841(d) and 27 CFR 555.23 (relating to list of explosive materials).~~

EXPLOSIVES— ANY CHEMICAL COMPOUND, MIXTURE, OR DEVICE, THE PRIMARY OR COMMON PURPOSE OF WHICH IS TO FUNCTION BY EXPLOSION. THE TERM INCLUDES DYNAMITE AND OTHER HIGH EXPLOSIVES, BLACK POWDER, PELLET POWDER, INITIATING EXPLOSIVES, DETONATORS, SAFETY FUSES, SQUIBS, DETONATING CORD, IGNITER CORD, AND IGNITERS. THE TERM INCLUDES ALL ITEMS IN THE "LIST OF EXPLOSIVE MATERIALS" PROVIDED FOR IN 27 CFR 555.23.

Limited—A classification of blaster's license applicable to persons who supervise the loading or detonate explosives in operations in which the use of explosives is not related to excavation or demolition.

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.

Responsible person—

~~—(i) An individual who has the authority to direct the management and policies of the ATF licensee or permittee pertaining to explosive materials.~~

~~—(ii) Generally, the term includes partners, sole proprietors, site managers, corporate officers and directors, and majority shareholders.~~

§ 210.13. General.

(a) A person may not detonate explosives or supervise blasting activities unless the person has obtained a blaster's license.

~~(b) A blaster's license will only be issued or renewed after it is verified that the applicant has complied IS IN COMPLIANCE with 18 U.S.C.A. Chapter 40 and 27 CFR Part 555 (relating to commerce in explosives), and has undergone a background check as either a responsible person or an employee possessor by the ATF. Verification can be provided by the applicant entering the ATF license or permit number under which the requirement for a background check was met.~~

~~[(b)] (c)~~ The Department may exempt certain individuals from needing a blaster's license if the person is detonating extremely small amounts of explosives for industrial or research purposes. The Department will consider a written request for an exemption from the person seeking the exemption.

~~[(c)] (d)~~ Upon request, a blaster shall exhibit a blaster's license to the following:

- (1) An authorized representative of the Department.
- (2) The blaster's employer or an authorized representative of the employer.
- (3) A police officer acting in the line of duty.

~~[(d)] (e)~~ A blaster's license is not transferable.

§ 210.15. License application.

(a) The license application shall be on forms provided by the Department and be accompanied by a check for ~~[\$50]~~~~-\$150~~ payable to the Commonwealth of Pennsylvania. The complete application shall be submitted to the Department at least 2 weeks prior to the examination.

* * * * *

§ 210.16. Examinations.

* * * * *

(c) An applicant failing to appear for a scheduled examination forfeits the application fee unless the applicant provides written notice to the Department 2 weeks prior to the examination date or submits a valid medical excuse in writing.

* * * * *

§ 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]~~ law enforcement, surface mining, underground noncoal mining, mine opening blasting, industrial, limited and demolition.

* * * * *

(d) A blaster's license is renewable if the blaster can demonstrate that he has had a **minimum** of 8 hours of continuing education in Department-approved courses related to blasting and safety within the ~~[3 year]~~ 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]~~~~-\$150~~, payable to the Commonwealth of Pennsylvania.

* * * * *

§ 210.19. Suspension, modification and revocation.

The Department may issue orders suspending, modifying or revoking a blaster's license. Before an order is issued, the Department will give the blaster an opportunity for an informal meeting to discuss the facts and issues that form the basis of the Department's determination to suspend, modify or revoke the license. The Department may suspend, modify or revoke a

blaster's license for violations of this chapter and [Chapter 211 (relating to storage, handling and use of explosives in surface applications)] Chapters 77, 87, 88 and 211.

~~—(Editor's Note: The following section is new and printed in regular type to enhance readability.)~~

~~§ 210.20. Fees.~~

~~—The Department will assess an annual administration fee for the administration of blaster's licenses. The annual administration fee for a blaster's license is \$10.~~

CHAPTER 211. STORAGE, HANDLING AND USE OF EXPLOSIVES

Subchapter A. GENERAL PROVISIONS

§ 211.101. Definitions.

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

ATF—The United States Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives.

Access point—A point in the outer perimeter security and a point in the inner perimeter security that allows entry to or exit from the magazine or the magazine site.

Acts—Sections 7 and 11 of the act of July 1, 1937 (P. L. 2681, No. 537) (73 P. S. §§ 157 and 161), section 3 of the act of July 10, 1957 (P. L. 685, No. 362) (73 P. S. § 166) and Reorganization Plan No. 8 of 1981 (71 P. S. § 751-35).

Airblast—An airborne shock wave resulting from an explosion, also known as air overpressure, which may or may not be audible.

~~**Annual administration fee**—A nonrefundable fee assessed annually based on the cost to the Department of inspecting and administering a permitted activity or a licensed facility and to administer a permit or license.~~

AT-THE-HOLE COMMUNICATION—COMMUNICATION BETWEEN THE DRILLER WHO DRILLED THE BLAST HOLES TO BE LOADED IN A BLAST AND THE BLASTER-IN-CHARGE OF THAT BLAST IN WHICH THE DRILLER DESCRIBES THE CONDITIONS OF THE BOREHOLES THAT THE DRILLER DRILLED. AT THE HOLE COMMUNICATION MAY CONSIST OF THE FOLLOWING: CONES PLACED IN THE BOREHOLES WITH MESSAGES DESCRIBING BOREHOLE CONDITIONS OR VERBAL COMMUNICATION IN WHICH THE DRILLER DESCRIBES THE CONDITION OF THE BOREHOLES.

Blast area—The area around the blast site that **[should] must be cleared and secured to prevent ~~the potential for~~ injury to persons and damage to property.**

Blast site—The specific location where the explosives charges are loaded into the blast holes.

* * * * *

Concertina razor wire—Razor wire that is extended in a spiral for use as a barrier, such as along or on a fence and having a minimum of 101 coils of wire to 50 linear feet.

Cube root scaled distance ($Ds^{1/3}$)—A value calculated by using the formula $Ds^{1/3} = D/(\text{cube root}) W$, where actual distance (D) in feet measured in a horizontal line from the blast site to the nearest building or structure not owned or leased by the blasting activity applicant, the permittee or their customers, is divided by the cube root of the maximum weight of explosives (W) in pounds detonated per delay period of less than 8 milliseconds. **CUBE ROOT SCALED DISTANCE IS USED TO ESTIMATE AIRBLAST LEVELS.**

Delay interval—The designed time interval, usually in milliseconds, between successive detonations.

Detonator—

(i) A device containing an initiating or primary explosive that is used for initiating detonation of explosives.

(ii) The term includes electric blasting caps of instantaneous and delay types, blasting caps for use with safety fuses, detonating cord, delay connectors, and nonelectric instantaneous and delay blasting caps.

[Display fireworks]—

(i) **Large fireworks designed primarily to produce visible or audible effects by combustion, deflagration or detonation.**

(ii) **The term includes, but is not limited to, salutes containing more than 2 grains (130 mg) of explosive materials, aerial shells containing more than 40 grams of pyrotechnic compositions, and other display pieces which exceed the limits of explosive materials for classification as consumer fireworks. Display fireworks are classified as fireworks UN0333, UN0334 or UN0335 by the United States Department of Transportation at 49 CFR 172.101 (relating to purpose and use of hazardous materials table).**

(iii) **The term also includes fused setpieces containing components which together exceed 50 mg of salute powder.**

Explosive—A chemical compound, mixture or device that contains oxidizing and combustible materials or other ingredients in such proportions or quantities that an ignition by fire, friction, concussion, percussion or detonation may result in an explosion.

(i) The term includes safety fuse, squibs, detonating cord and igniters.

(ii) The term does not include the following:

(A) Commercially manufactured black powder, percussion caps, safety and pyrotechnic fuses, matches and friction primers, intended to be used solely for sporting, recreational or cultural purposes in antique firearms or antique devices, as defined in 18 U.S.C.A. § 921 (relating to definitions).

(B) Smokeless powder, primers used for reloading rifle or pistol cartridges, shot shells, percussion caps and smokeless propellants intended for personal use.]

~~**Employee possessor**—An individual who is in possession of or has control of explosives materials.~~

~~**Explosive materials**—The term as defined in § 210.11 (relating to definitions).~~

EXPLOSIVES— ANY CHEMICAL COMPOUND, MIXTURE, OR DEVICE, THE PRIMARY OR COMMON PURPOSE OF WHICH IS TO FUNCTION BY EXPLOSION. THE TERM INCLUDES DYNAMITE AND OTHER HIGH EXPLOSIVES, BLACK POWDER, PELLET POWDER, INITIATING EXPLOSIVES, DETONATORS, SAFETY FUSES, SQUIBS, DETONATING CORD, IGNITER CORD, AND IGNITERS. THE TERM INCLUDES ALL ITEMS IN THE “LIST OF EXPLOSIVE MATERIALS” PROVIDED FOR IN 27 CFR 555.23.

Flyrock—Overburden, stone, clay or other material [ejected] cast from the blast [area] site through the air or along the ground, by the force of a blast[.], and which travels to one of the following areas:

(i) Beyond the blast area.

(ii) ~~Onto property neither owned nor leased by the permittee or its customer.~~

~~(iii) Beyond permit boundaries on blasting operations on mining permits issued under the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19b), or the Noncoal Surface Mining and Conservation and Reclamation Act (52 P. S. §§ 3301—3326).~~

FMCSA INSPECTION—THE INSPECTION REQUIRED BY THE FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION IN 40 CFR 396.3.

Indoor magazine—A magazine located entirely within a secure intrusion-resistant and theft-resistant building which is primarily used for commercial or industrial purposes.

* * * * *

Misfire—Incomplete detonation of explosives.

~~*Nuisance*—A condition which causes a hazard to public health or safety.~~

MSHA-U.S. DEPARTMENT OF LABOR MINE SAFETY AND HEALTH ADMINISTRATION.

OSHA- U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.

Outdoor magazine site—The contiguous area of land upon which the following are located: a magazine or group of magazines; the outer perimeter security, and the inner perimeter security, if any.

* * * * *

Person—A natural person, partnership, association[,], or corporation, or an agency, instrumentality or entity of state government or a municipality.

Primer—A cartridge or package of high explosives into which a detonator has been inserted or attached.

[Purchase—To obtain ownership of explosives from another person.

Sale or sell—To transfer ownership of explosives to another person.]

***Responsible person*—**

~~—(i) An individual who has the authority to direct the management and policies of the ATF licensee or permittee pertaining to explosive materials.~~

~~—(ii) Generally, the term includes partners, sole proprietors, site managers, corporate officers and directors, and majority shareholders.~~

SQUARE ROOT Scaled distance (Ds)*—A value calculated by using the formula $Ds = D/(\text{square root } W)$, where actual distance (D) in feet, measured in a horizontal line from the blast site to the nearest building or structure, neither owned nor leased by the blasting activity permittee or its customer, divided by the square root of the maximum weight of explosives (W) in pounds, that is detonated per delay period of less than 8 milliseconds. **SQUARE ROOT SCALED DISTANCE IS USED TO ESTIMATE GROUND VIBRATION.*

[Ds = D/(square root) W]

Stemming—Inert material placed in a blast hole after an explosive charge for the purpose of confining the explosion gases to the blast hole, and inert material used to separate explosive charges in decked holes.

Structure—

(i) A combination of materials or pieces of work built or composed of parts joined together in some definite manner for occupancy, use or ornamentation.

(ii) The term includes everything that is built or constructed, including bridges, offices, water towers, silos and dwellings.

~~*Unauthorized detonation of explosives*—The detonation of explosives by a person who is not licensed to detonate explosives under Chapter 210 or the detonation of explosives not authorized by a permit issued under this chapter.~~

~~—*Unauthorized handling and use of explosives*—The transportation, handling or use of explosives by a person who is not a responsible person or an employee possessor acting under the authorization of a responsible person.~~

~~—*Unauthorized storage of explosives*—Storage of explosives that is not in a magazine licensed by the Department or by persons who are not responsible persons or employee possessors acting under the authorization of a responsible person.~~

Utility line—An electric cable, fiber optic line, pipeline or other type of conduit used to transport or transmit electricity, gases, liquids and other media including information.

Wheeled vehicle—A vehicle that moves about on three or more wheels and has a gross vehicle weight of less than 11,000 pounds.

§ 211.102. Scope.

(a) This chapter applies to persons using[, storing, purchasing and selling] or storing explosives and engaging in blasting activities within this Commonwealth. Persons [using and] storing explosives **underground** at **permitted** underground mines are exempt from this chapter. **Persons conducting blasting underground at underground mines shall comply with § 211.151 (relating to prevention of damage or injury).** The storage of explosives in magazines on the surface at an underground [**noncoal**] mine is subject to the applicable requirements of this chapter. The provisions of this chapter that are more stringent than the blasting provisions in Chapters 77, 87 and 88 (relating to noncoal mining; surface mining of coal; and anthracite coal) apply to blasting activities at coal or noncoal surface mines.

(b) Compliance with this chapter does not relieve a person who is engaged in **[the purchase or sale of explosives, or]** blasting activities[,] from compliance with other applicable laws or regulations of the Commonwealth.

§ 211.103. Enforcement.

(a) The Department may issue orders necessary to implement this chapter including an order to suspend, modify or revoke a license or permit authorized by this chapter, **or to require corrective action for a violation identified in subsection (c).**

(b) Before issuing an order modifying peak particle velocity or airblast limits in a blasting activity permit, the Department will first provide the permittee with an opportunity to meet and discuss modifications.

(c) It is a violation of this chapter to:

(1) Fail to comply with this chapter or Chapter 77, 87 or 88 (relating to noncoal mining; surface mining of coal; and anthracite coal), regarding storage and use of explosives.

(2) Fail to comply with any order or permit or license of the Department issued under this chapter or Chapter 77, 87 or 88.

(3) Hinder, obstruct or interfere with the Department or its personnel in the performance of any duty hereunder.

(4) Violate 18 Pa.C.S. § 4903 or § 4904 (relating to false swearing; and unsworn falsification to authorities).

(d) The Department will not issue a permit or license to any person who has done any of the following:

(1) Failed or continues to fail to comply with this chapter, a condition of a permit issued under this chapter or an order issued to enforce the requirements of this chapter.

(2) Demonstrated an inability or lack of intention to comply with this chapter as indicated by a past or continuing violation.

(3) Not complied with the 18 U.S.C.A. Chapter 40 and 27 CFR Part 555 (relating to commerce in explosives) and does not have an ATF license or permit, when required.

~~**(4) Not met the requirements to be authorized as an employee possessor or responsible person by the ATF.**~~

Subchapter B. STORAGE AND CLASSIFICATION OF EXPLOSIVES

§ 211.112. Magazine license and fees.

(a) A person storing explosives shall do so in a magazine licensed by the Department. A person may not construct, install or modify a magazine until the Department has issued or amended the license in writing. The licensee shall store explosives in accordance with the approved application, the license and this chapter.

(b) A magazine license will only be issued or renewed after it is verified that the applicant has complied with 18 U.S.C.A. Chapter 40 and 27 CFR Part 555 (relating to commerce in explosives) and is authorized as either a licensee or a permittee by the ATF. Verification can be provided by the applicant entering the ATF license or permit number on the license application.

[(b)] (c) The license specifies the types and quantities of explosives to be stored in the magazine and any other condition necessary to ensure that the proposed activity complies with applicable statutes and this chapter.

[(c) Licenses expire annually on December 31 of each year.] (d) Licenses will be issued for a period of time set by the Department and the expiration date will appear on the license. If the Department receives a complete renewal application by [December 31] the expiration date, the licensee may continue to operate under the current license until the Department acts on the renewal application.

[(d)] (e) License fees are as follows:

* * * * *

§ 211.113. Application contents.

* * * * *

(b) A completed license application [shall] **must** include:

(1) The applicant's name, address [and], telephone number **and ATF license or permit number.**

* * * * *

§ 211.115. Standards for classifying and storing explosives and constructing, maintaining and siting magazines.

* * * * *

(i) A licensee will be deemed to be in compliance with this section as to having deterred or obstructed, to the greatest extent possible, unauthorized intrusion upon a magazine site if the licensee constructs, installs, implements and maintains the security measures specified in subsection (d), which meet the requirements of this section and which are specified by the licensee in one of the following:

- (1) A plan submitted to the Department under subsection (f).
- (2) A plan submitted to and approved by the Department under subsection (g).
- (3) A plan submitted to the Department under § 211.113(b)(6) (relating to application contents).

(j) All magazine licensees shall ensure that a person is available at all times to respond to emergencies and to provide the Department access to the licensed magazines for the purpose of determining regulatory compliance. Department access to the magazines shall be granted within 4 hours of a Department request or within a time frame agreed upon by the Department representative and the magazine licensee. Department requests may be verbal or written.

(Editor's Note: Sections 211.116 and 211.117 are new and printed in regular type to enhance readability.)

§ 211.116. Decommissioning magazines.

Prior to the expiration or termination of a magazine license, the licensee shall remove and properly dispose of all explosives from the magazine and submit to the Department documentation as to the disposition of these explosives. This documentation shall be provided within 20 days of the expiration or termination of the magazine license.

§ 211.117. Daily summary of magazine transactions.

The licensee shall make records of inventory required under 27 CFR 555.122, 555.123, 555.124, and 555.125 AND 555.127 available to the Department upon request.

Subchapter C. PERMITS

§ 211.121. General requirements.

(a) Except as otherwise provided in this subchapter, a person may not engage in blasting activities[, or sell or purchase explosives] in this Commonwealth without first obtaining the appropriate permit from the Department issued under this chapter.

(b) Permits under this chapter are not required for the [sale, purchase or] use of fireworks governed by the act of May 15, 1939 (P. L. 134, No. 65) (35 P. S. §§ 1271—[1277] 1278).

(c) A permit issued under the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19b), or the Noncoal Surface Mining Conservation and Reclamation Act (52 P. S. §§ 3301—3326), and the regulations promulgated thereunder, authorizing blasting activity shall act as a blasting activity permit issued under this chapter.

(d) An application for a permit **[for the sale or purchase of explosives or]** to conduct blasting activities shall be on a form provided by the Department. A permit will not be issued unless the application is complete and demonstrates that the proposed activities comply with the applicable requirements of this chapter. The Department will notify applicants of an incomplete application and identify the items necessary to complete the application. The permittee shall comply with the approved application, the permit and this chapter.

(e) The Department will not issue a permit to any person who ~~has~~ either:

(1) ~~Failed and continues to fail~~ **FAILS** to comply with this chapter or a condition of a permit issued under this chapter or an order issued to enforce this chapter.

(2) ~~Demonstrated~~ **DEMONSTRATES** an inability or lack of intention to comply with this chapter as indicated by past or continuing violations.

(f) ~~The permittee, all subcontractors~~ **THE BLASTING CONTRACTOR** listed on the permit and the blaster-in-charge of any blasts conducted on a permit shall comply with the approved application, the permit and this chapter.

§ 211.122. [Permits to sell explosives] (Reserved).

[(a) An application for a permit to sell explosives shall:

(1) Identify the applicant's name, address, telephone number and type of business.

(2) Identify a contact person, including name, title and telephone number.

(3) Specify the type of explosives to be sold.

(4) State whether the applicant will purchase or manufacture the explosives to be sold.

(5) For in-State sellers, include the applicant's magazine license number, if applicable.

(b) Permits to sell explosives are not transferable.

(c) Permits to sell explosives expire on April 30 of each year. If the Department receives a complete renewal application by April 30, the permittee may continue to operate under the current permit until the Department acts on the renewal application.

(d) A permit to sell explosives shall:

(1) Identify the permittee.

(2) Specify the type of explosives that the permittee may sell.

(3) Contain conditions, as necessary, to ensure that the proposed activity complies with applicable statutes and this chapter.]

§ 211.123. [Permits to purchase explosives] (Reserved).

[(a) An application for a permit to purchase explosives shall:

(1) Identify the applicant's name, address, telephone number and type of business.

(2) Identify a contact person, including name, title and telephone number.

(3) Identify the location and license number of the magazine to be used for storing the explosives, if applicable.

(4) Specify the type of explosives that will be purchased.

(5) Specify whether the explosives are being purchased for sale or use by the permittee.

(b) Permits to purchase explosives are not transferable.

(c) Permits to purchase explosives expire on April 30 of each year. If the Department receives a complete renewal application by April 30, the permittee may continue to operate under the current permit until the Department acts on the renewal.]

§ 211.124. Blasting activity permits.

(a) An application for a blasting activity permit shall be prepared by a blaster authorized by the Department to conduct the blasting proposed in the application and [shall] must include:

(1) The applicant's name, address, telephone number and type of business.

[(2) A contact person's name, title and telephone number.]

(2) The signature of the applicant or an authorized representative of the applicant.

(3) The ATF license or permit number of the applicant or the ~~contract blaster~~ **BLASTING CONTRACTOR.**

(4) The name, title and telephone number of a person who can be reached by the Department in the event of an emergency or other reason relating to the blasting activity permitted.

[(3)] (5) The identity of independent subcontractors who will be performing the blasting activities.

[(4)] (6) The [type] specific types of explosives to be used.

[(5)] (7) The maximum amount of explosives that will be detonated per delay interval of less than 8 milliseconds.

[(6)] (8) The maximum amount of explosives that will be detonated in any one blast.

(9) The minimum SQUARE ROOT scaled distance based on calculations made from actual site conditions. ~~In~~ EXCEPT FOR demolition blasting operations WHERE the minimum scaled distance must be cube root scaled distance MUST BE USED.

[(7)] (10) A map indicating the location where the explosives will be used and the proximity of explosives use to public roads, buildings or other structures.

[(8)] (11) The purpose for which the explosives will be used.

[(9)] (12) The location and license number of the magazine that will be used to store the explosives, if applicable.

[(10)] (13) A description of how the monitoring requirements of Subchapter G (relating to requirements for monitoring) will be satisfied.

[(11)] (14) Proof [of] that the permittee has third party general liability insurance in the amount of [~~\$300,000~~] \$1 million or greater per occurrence to cover the blasting activity. This requirement is not applicable if the permittee is a noncoal surface mine operator who produces no more than 2,000 tons (1,814 metric tons) of marketable minerals per year from all its noncoal surface mining operations.

[(12)] (15) The anticipated duration of the blasting activity for which the permit is needed.

[(13)] (16) The anticipated days of the week and times when blasting may occur.

[(14)] (17) The distance in feet and direction in degrees to the [closest] building not owned by the permittee or its customer that will be closest to the blasting.

[(15)] (18) Other information needed by the Department to determine compliance with applicable laws and regulations.

[(16)] (19) The printed name, signature and license number of the blaster who prepared the application.

[(17)] (20) ~~Proof that residents within [200 feet (65.61 meters)] 300 feet (91.44 meters) of the blast site, or other distance established in the permit, were informed of the proposed blasting operation. This notification could be a personal notification, written material left at each residence[,], or first class mail. The notification [will] must provide general information about the blasting operation including the duration of the operation.~~

~~—(21)—Loading plans which describe ranges of bore hole diameters and their depths, burdens and spacings.~~

~~—(22) (21) Types of stemming material.~~

(b) Blasting activity permits are not transferable.

* * * * *

(d) The permittee may request extensions and modifications by submitting an amended application.

(e) The blaster-in-charge shall have in his possession a copy of the approved blasting activity permit authorizing the blasting activity being conducted. For blasting activities conducted on and authorized by permits issued under the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19b), or the Noncoal Surface Mining and Conservation and Reclamation Act (52 P. S. §§ 3301—3326), possession of the blasting plan for that permit constitutes possession of a copy of the approved blasting activity permit authorizing the blasting activity being conducted.

§ 211.125. Blasting activity permit-by-rule.

(a) [A] **Except for blasting activities for the purpose of demolition or seismic exploration, a person [shall] will be deemed to have a permit for a blasting activity if:**

* * * * *

~~—(Editor's Note: The following section is new and printed in regular type to enhance readability.)~~

~~§ 211.126. Fees:~~

~~—(a) Blasting activity permit fees are as follows:~~

~~—(1) Blasting activity permit—paper application—\$210~~

~~—(2) Blasting activity permit—filed online—\$130~~

~~—(3) Blasting activity permit by rule—\$12~~

~~—(b) Explosives storage license fees are as follows:~~

~~—(1) Magazine security plan required under § 211.113 (relating to application contents)—\$225~~

~~—(2) Explosive storage magazine security plan revision required under § 211.113—\$90~~

~~—(3) Explosive storage magazine decommissioning required under § 211.116 (relating to decommissioning magazines)—\$50 per magazine~~

~~—(c) The Department will assess a fee for inspecting and monitoring an explosive storage magazine. This annual administration fee will be assessed annually and will be collected as part of the explosive storage license application renewal process. The annual administration fee for each explosives storage magazine is \$85.~~

Subchapter D. RECORDS OF DISPOSITION OF EXPLOSIVES

§ 211.131. [Sales records] (Reserved).

[The seller shall keep an accurate record of every sale of explosives for 3 years. The record shall identify the purchaser's name and address, the Department purchase permit number, the date of the sale and the amount and types of explosives.]

§ 211.132. [Purchase records] (Reserved).

[The purchaser shall keep a record of all purchases of explosives for 3 years. The record shall identify the date, types and amounts of explosives purchased and the name and address of the seller.]

§ 211.133. Blast reports.

(a) The blaster-in-charge shall prepare a report of each blast to provide the Department with sufficient information to reconstruct the conditions and events surrounding a blast. The Department may develop and require a blast report form to be used. The blasting activity permittee shall retain the blast report for at least 3 years and shall make the blast report available to the Department upon request. Blast reports **[shall] must** contain, at a minimum, the following:

(1) **[The locations of the blast and monitoring readings.] The location of at least one corner of the blast pattern expressed in latitude and longitude.**

(2) **The distance in feet and direction in degrees from the blast to the seismograph monitoring location.**

(3) **The latitude and longitude and a brief description of the monitoring locations. If monitoring is conducted at a home or other building with a 911 address, the address of the structure must be provided.**

~~[(2)]~~ (4) **The name of the blasting activity permittee and blasting contractor, if applicable.**

~~[(3)]~~ (5) **The blasting activity permit or appropriate mining permit number.**

~~[(4)]~~ (6) **The date and time of the blast.**

[(5)] (7) The printed name, signature and license number of the blaster-in-charge.

[(6)] (8) The type of material blasted.

[(7)] (9) A sketch showing the number of blast holes, burden, spacing, pattern dimensions, delay timing sequence, description of the **ground CONDITIONS OF THE AREA IMMEDIATELY surrounding the blast site WHICH INCLUDES IDENTIFYING IF THE AREA IS SOLID ROCK, A MUCK PILE FROM A PREVIOUS BLAST, OR AN OPEN FACE**, and point of initiation.

[(8)] (10) The diameter and depth of **each blast [holes] hole**.

[(9)] (11) The height or length of stemming and deck separation for each hole.

(12) The amount of explosives loaded in each borehole.

[(10)] (13) The types of explosives used and arrangement in blast holes.

[(11)] (14) The total weight in pounds of explosives, **product density for bulk blasting agents, weight of packaged blasting agents** and primer cartridges used.

[(12)] (15) The maximum weight in pounds of explosives detonated per delay period of less than 8 milliseconds.

[(13)] (16) The type of circuit, if electric detonation was used.

[(14)] (17) The direction **in degrees** and distance in feet from the blast site to the nearest building not owned or leased by the blasting activity permittee or its customer.

[(15)] (18) A **general description, including the street address and latitude and longitude**, of the nearest building **[location]** not owned or leased by the blasting activity permittee or its customer **[based upon local landmarks]**.

[(16)] (19) The **SQUARE ROOT** scaled distance to the nearest building or other structure neither owned nor leased by the blasting activity permittee or its customer **EXCEPT FOR DEMOLITION BLASTING OPERATIONS WHERE THE CUBE ROOT SCALED DISTANCE MUST BE USED**.

[(17)] (20) The weather conditions.

[(18)] (21) The direction from which the wind was coming.

[(19)] (22) The measures taken to control flyrock, including whether or not mats were used.

[(20)] (23) The total quantity and type of detonators used and delays used.

[(21)] (24) The number of individuals in the blasting crew.

[(22)] (25) The maximum number of blast holes or portions of blast holes detonated per delay period less than 8 milliseconds.

(26) A drill log showing the condition of all of the blast holes prior to loading and any other bore holes in the blast site ~~related to the blasting activity.~~

[(23)] (27) The monitoring records required **[by] under § 211.173** (relating to monitoring records). Monitoring records shall be made part of the blast report within 30 days of the blast. Beginning July 14, 2004, monitoring records shall be made part of the blast report within 14 days of the blast. The Department may grant a waiver to allow monitoring records to be made part of the blasting record within 30 days of the blast if all blasts, regardless of scaled distance, are monitored and monthly summaries of these reports, including the information required **[in] under subsection (b)**, are provided. Monitoring records shall be made part of the blast report within 7 days, if requested by the Department.

[(24)] (28) If a misfire occurred, the actions taken to make the site safe as specified in § 211.157 (relating to postblast measures).

(b) The Department may require monthly summaries of these reports. The summaries shall include the date and time of the blasts, scaled distance, peak particle velocity, airblast, monitoring location, amount and types of explosives used and other information the Department deems necessary to ensure compliance with this chapter.

Subchapter E. TRANSPORTATION OF EXPLOSIVES

§ 211.141. General requirements.

The blasting activity[, **purchase or sale**] permittee shall:

* * * * *

(13) Only load explosives into **on-road** vehicles that have passed the State safety inspection or certification **OR AN FMCSA INSPECTION.**

(14) Only load explosives into off-road vehicles that are properly equipped to carry explosives.

(15) Remove explosives prior to conducting maintenance or repair work on vehicles containing explosives or detonators.

Subchapter F. BLASTING ACTIVITIES

§ 211.151. Prevention of damage or injury.

(a) [Blasting may not damage real property except for real property under the control of the permittee. If damage occurs, the blaster-in-charge shall notify the Department within 4 hours of learning of the damage.] Blasting shall be conducted to prevent injury to persons or damage to private or public property except for property owned or leased by the permittee or its customer. If damage to property or injuries to persons occurs, the blaster-in-charge shall notify the Department within 4 hours of learning of the damage or injuries occurring.

(b) Blasting shall be conducted in a manner that does not cause a nuisance.

~~[(b)] (e)~~ Blasting may not cause flyrock. If flyrock occurs, the blaster-in-charge shall notify the Department within 4 hours of learning of the flyrock.

~~[(c)] (d)~~ Blasts shall be designed and conducted in a manner that achieves either a scaled distance of 90 at the closest building or other structure designated by the Department or meets the [maximum] allowable [peak] particle velocity as indicated by Figure 1 at [the closest] any building or other structure designated by the Department. [However, blasting activities authorized prior to July 14, 2001, may continue as authorized unless the authorization is modified, suspended or revoked by the Department.] The scaled distance and [maximum] allowable [peak] particle velocity does not apply at a building or other structure owned or leased by the permittee or its customer.

* * * * *

~~[(d)] (e)~~ Blasts shall be designed and conducted to control airblast so that it does not exceed [the noise levels specified in Table 1 at a] 133 dBL at any building or other structure designated by the Department unless the building is owned or leased by the permittee or its customer.

[Table 1

Lower frequency limits of measuring System in Hz(+3dB)	Maximum allowable levels in dBL
0.1 Hz or lower—flat response*	134 peak
2.0 Hz or lower—flat response	133 peak
6.0 Hz or lower—flat response	129 peak
C-weighted—slow response*	105 peak

*only when approved by the Department

(e) The Department may establish an alternative peak particle velocity or airblast level if it determines that an alternative standard is appropriate because of density of population, land use, age or type of structure, geology or hydrology of the area, frequency of blasts or other factors.]

(e)(f)–Except on permits issued under the Surface Mining Conservation and Reclamation Act (52 P. S. §§ 1396.1—1396.19b), the Department may establish an alternative peak particle velocity or airblast level at a building or other structure if it determines that either:

(1) The alternative standard will provide for adequate protection of the building or other structure.

(2) The owner of the building or the other structure waives the ground vibration limit in subsection ~~(d)~~ (c) or the airblast limit in subsection ~~(e)~~(d).

(f)(g) The blasting activity permittee shall notify the Department within 24 hours of learning that the maximum allowable peak-particle velocity or the maximum allowable airblast level are exceeded at any building or other structure designated by the Department.

(g)(h) All blasting activities shall be conducted in a manner which prevents damage to utility lines.

§ 211.152. Control of noxious gases, including carbon monoxide and oxides of nitrogen.

(a) A blast shall be conducted so that the toxic gases generated by the blast, including carbon monoxide and oxides of nitrogen, do not affect the health [and] or safety of individuals. [Effects from gases] Gas migration may be prevented or minimized by taking measures such as venting the gases to the atmosphere[, and interrupting the path along which gases may flow [, and evacuating]. Evacuating people from areas that may contain gases could prevent their health from being affected.

(b) The blasting activity permittee shall notify the Department within 4 hours if the toxic gases generated by the blast affect the health or safety, or both, of individuals.

§ 211.154. Preparing the blast.

(a) The blasting activity permittee shall designate a blaster-in-charge for each blast. The blaster-in-charge shall control and supervise the blasting activity. [The] A blaster-in-charge is responsible for all effects of the [blast] blasts that blaster-in-charge detonates. The blasting activity permittee is responsible for the effects of all blasts detonated under the blasting activity permit.

(b) Only equipment necessary for loading blast holes may be allowed to operate within 50 feet (15.24 meters) of the blast site. The Department may establish, in writing, a different distance limitation. If a written request for a lower distance limitation is submitted to the Department, the request must provide detailed information including why the lower distance limitation is necessary and how blast site safety will be maintained. The Department's written establishment for a lower distance limitation will include all necessary safety requirements.

(c) A blaster-in-charge may not prepare or detonate a blast unless another person is present, able and ready to render assistance in the event of accident or injury.

(d) The blaster-in-charge shall **[make every effort to]** determine the condition of the material to be blasted from the individual who drilled the blast holes **[or]**, from the drill log **or at-the-hole communication prior to loading a blast. The permittee shall ensure that a written drill log or at-the-hole communication is available to the blaster-in-charge.**

(e) Only the blaster-in-charge, other blasters[,], and up to six assistants per blaster may be at a blast site once loading of blast holes begins.

(f) While loading a blast hole, the following measures shall be followed:

* * * * *

(5) Each blast hole shall be logged throughout the **[leading] loading** process to measure the amount and location of explosives placed in the blast hole. The information is to be recorded on the blast report required **[by] under § 211.133 (relating to blast [report] reports).**

* * * * *

(n) **[Blasting activities may not be conducted within 800 feet (243.84 meters) of a public roadway unless precautionary measures are taken to safeguard the public. Precautionary measures include stopping or slowing of traffic and posting signs.]** The permittee shall ensure that public highways and entrances to the areas where blasting will occur are barricaded and guarded if the highways and entrances to areas where blasting will occur are located within 800 feet of a point where a blast is about to be fired. The permittee may use an alternative measure to this requirement if the permittee demonstrates, to the Department's satisfaction, that the alternative measure is at least as effective at protecting persons and property from the adverse effects of a blast. Alternative measures are measures such as:

(1) **Slowing or stopping traffic in coordination with appropriate State or local authorities, including local police.**

(2) **Using mats to suppress flyrock.**

(3) **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:**

(i) **Orienting the blast so that the direction of relief is away from public highways or operation entrances.**

(ii) **Adjusting blast design parameters including:**

(A) **The diameter of holes.**

- (B) The number of rows.
- (C) The number of holes.
- (D) The amount and type of explosive.
- (E) The burden and spacing.
- (F) The amount and type of stemming.
- (G) The powder factor.

(o) THE PERMITTEE SHALL POST SIGNS AT ACCESS POINTS OF ALL APPROACHES TO A BLAST SITE WHICH CLEARLY WARN OF EXPLOSIVE USE. IF THERE ARE NO SPECIFIC ACCESS POINTS, A MINIMUM OF FOUR SIGNS SHALL BE POSTED ON ALL SIDES OF THE BLAST SITE AT A DISTANCE OF 100 FEET FROM THE BLAST SITE. POSTING OF SIGNS SHALL COMPLY WITH 29 CFR 1926.905(P) (RELATING TO CONSTRUCTION BLASTING), 30 CFR 77.1303(G) (RELATING TO BLASTING AT SURFACE COAL MINES AND SURFACE AREAS OF UNDERGROUND COAL MINES) OR 30 CFR 56.6306(A) (RELATING TO BLASTING AT METAL AND NONMETAL MINES), AS APPLICABLE.

§ 211.155. Preblast measures.

Prior to detonating a blast, the blaster-in-charge shall:

* * * * *

(6) At least 1 minute but no more than 2 minutes prior to detonation, sound a warning signal of three blasts, each lasting approximately 5 seconds. The warning signal shall be of sufficient power to be heard 1,000 feet (304.80 meters) from the blast site.

~~—(7) Post signs at access points to a blast site which clearly warn of explosives use. If there are no specific access points, a minimum of four signs shall be posted on all sides of the blast site at a distance of 100 feet from the blast site.~~

§ 211.158. Mudcapping.

Mudcapping in blasting activities is allowed only if the blaster-in-charge determines that drilling the material to be blasted would endanger the safety of the workers. If mudcapping is necessary, no more than [10 pounds (4.53 kilograms)] 1 pound (0.454 kilogram) of explosives shall be used for a blast.

Subchapter G. REQUIREMENTS FOR MONITORING

§ 211.171. General provisions for monitoring.

(a) If the **SQUARE ROOT** scaled distance of a blast is 90 or numerically less at the closest building not owned or leased by the blasting activity permittee or its customer, ground vibration and airblast monitoring shall be conducted. The Department may require the permittee to conduct ground vibration and airblast monitoring at other buildings or structures even if the scaled distance is greater than 90.

[(b) Blasting activities without monitoring may be considered in compliance with this chapter if at a specified location, on at least five blasts, monitoring has demonstrated that the maximum peak particle velocity at the specified location represents more than a 50% reduction from the limit in the permit and this chapter. Future blasts shall maintain a scaled distance equal to or greater than the scaled distance for the monitored blasts.]

(c) (b) If monitoring is required, a ground vibration and airblast record of each blast shall be made part of the blast report.

[(d)] (c) If monitoring is performed with instruments that have variable "trigger levels," the trigger for ground vibration shall be set at a particle velocity of no more than .25 [inches] inch per second unless otherwise directed by the Department.

[(e)] (d) If the peak particle velocity and airblast from a blast are below the set trigger level of the instrument, a printout from the instrument shall be attached to the blast report. This printout shall provide the date and time when the instrument was turned on and off, the set trigger levels and information concerning the status of the instrument during the activation period. When an instrument is used that does not provide this information, the Department will allow the permittee to supply on/off times on a signed statement.

(e) Blasting seismographs shall be deployed in the field according to the guidelines established by the International Society of Explosives Engineer's Standards Committee.

§ 211.172. Monitoring instruments.

(a) If monitoring is required, the monitoring instrument shall provide a permanent record of each blast.

[(1) A monitoring instrument for recording ground vibration, at a minimum, shall have:

(i) A frequency range of 2 Hz to 100 Hz.

(ii) Particle velocity range of .02 to 4.0 inches (5.08×10^{-4} to 0.10 meters) per second or greater.

(iii) An internal dynamic calibration system.

(2) A monitoring instrument used to record airblast shall have:

(i) A lower frequency limit of 0.1, 2.0 or 6.0 Hz.

(ii) An upper end flat-frequency response of at least 200 Hz.

(iii) A dynamic range that, at a minimum, extends from 106 to 142 dBL.]

(b) The monitoring instrument must be constructed to meet the guide established by the International Society of Explosives Engineer's Standards Committee.

[(3)] (c) A monitoring instrument shall be calibrated annually and when an instrument is repaired and the repair may [effect] affect the response of the instrument. Calibration shall be done by the manufacturer of the equipment, or by an organization approved by the manufacturer, or by an organization having verifiable knowledge of the calibration procedures developed by the manufacturer. The calibration procedure shall include testing the response of the entire system to externally-generated dynamic inputs. These inputs shall test the entire monitoring system at a sufficient number of discrete frequency intervals to assure flat response throughout the frequency ranges specified by this chapter. Dynamic reference standards used for calibration shall be traceable to the National Institute of Standards and Technology [(NIST)]. Calibration procedures and documentation of calibration shall be made available for review by the Department.

[(4)] (d) A nonalterable sticker that is clearly visible shall be firmly affixed to the instrument. The sticker shall indicate the name of the calibration facility, the calibration technician, the date of calibration and frequency range of the airblast monitor.

Subchapter H. BLASTING ACTIVITIES NEAR UNDERGROUND UTILITY LINES

§ 211.182. General provisions.

(a) Prior to conducting blasting activities within 200 feet of an underground utility line, the blasting activity permittee shall ensure that the owner of the line is notified of the blasting activities and demonstrate to the Department that that notification has been made.

[(a)] (b) Blasts shall be designed and conducted so that they provide the greatest relief possible in a direction away from the utility line and to keep the resulting vibration and actual ground movement to the lowest possible level.

[(b) Blasting shall use a type of explosive specifically designed to minimize the likelihood of propagation between explosive charges.

(c) When blasting within 200 feet (60.96 meters) of a utility line, blast holes may not exceed 3 inches (7.62 x 10⁻² meters) in diameter.

(d)] (c) Blasting in the vicinity of a utility line shall be conducted as follows:

(1) Excavation from the ground surface to a depth corresponding to the elevation of the top of the buried utility line may proceed at the discretion of the blaster-in-charge, using safe, accepted techniques.

(2) Once the excavation has attained a depth equal to the elevation of the top of the buried utility line or if the line is exposed, or makes solid contact with the surface, the vertical depth of subsequent blast holes shall be restricted to one half the horizontal distance from the closest portion of the utility line.

[(e)] (d) If one or more of the requirements listed in this section are not feasible or creates a potential safety problem, the permittee may apply to the Department for a waiver of the provision or provisions in question. This waiver will be granted if, in the judgment of the Department and the utility owning the lines, the alternate procedure does not endanger the utility line.

(Editor's Note: Subchapters I and J are new and printed in regular type to enhance readability.)

Subchapter I. SEISMIC EXPLORATION

Sec.

211.191. Scope.

211.192. Permits.

211.193. Blasting records.

211.194. General requirements for handling explosives on a seismic exploration operation.

§ 211.191. Scope.

This subchapter applies to seismic exploration activities which employ explosives. Unless otherwise specified, Subchapters A—H apply to persons engaging in seismic exploration activities using explosives.

§ 211.192. Permits.

In addition to the requirements of Subchapter C (relating to permits), an application for a blasting activity permit for seismic exploration must include the following:

(1) A detailed plan describing how explosives loaded in the ground will be kept under the control of the permittee, secured against being compromised, detonated, unearthed or otherwise tampered with.

(2) The maximum time, in days, that explosives will be allowed to remain in the borehole from loading until detonation.

(3) A map clearly delineating all of the areas where the placement of explosives charges is planned and the footprint of any mining permits where mining, reclamation or water treatment are occurring, or may occur, within 500 feet of where the placement of explosives charges is planned.

(4) Detailed information, including data sheets and warranty information, on the explosives products to be used.

§ 211.193. Blasting records.

In addition to the requirements of § 211.133 (relating to blast reports), blast reports on seismic exploration operations must contain, at a minimum, the following:

- (1) The time and date the explosives were loaded into holes.
- (2) The blaster-in-charge who supervised or loaded the charges, or both.
- (3) The specific location of the loading of the charges, expressed in latitude and longitude.
- (4) The blaster-in-charge who detonated the charges.
- (5) The time and date the charges were detonated.

§ 211.194. General requirements for handling explosives on a seismic exploration operation.

(a) Section 211.153(e) and (f) (relating to general requirements for handling explosives) is not applicable to the handling and use of explosives for seismic exploration operations.

(b) Except as specified in subsection (a), in addition to the requirements of Subchapter F (relating to blasting activities), the following provisions apply to the handling and use of explosives on seismic exploration operations:

(1) All explosives loaded into boreholes shall either be detonated or removed from the borehole after the maximum number of days specified in the applicable blasting activity permit.

(2) Explosives charges may not be placed closer than 300 feet from any building or other structure designated by the Department unless authorized by the Department.

(3) All detonators used in seismic exploration operations must employ the best technology available for security and functionality under the conditions into which the detonators are loaded.

(4) Explosives may not be placed on areas permitted for mining activities under Chapter 77 or 86 (relating to noncoal mining; and surface and underground coal mining: general) without prior Department approval. To obtain Department approval to place explosives on area permitted for mining activities, the permit applicant shall provide information including, but not limited to, the following:

(i) Demonstration of authorization to place explosives charges and to conduct activities on the site.

(ii) A plan to ensure the safety and security of explosives charges on the mining permit from loading through detonation of the charges.

(iii) A map detailing the specific location of where charges are to be placed on the mining permit area.

(iv) If the United States Department of Labor, Mine Safety and Health Administration required training is necessary, how and when that training will be obtained and who will obtain the training. The permittee shall provide written documentation of the training to the Department prior to entry onto the mining permit.

(5) The permittee is responsible for the security of all charges in the ground to prevent the charges from being detonated, removed or otherwise tampered with. The permittee shall secure all explosives charges in accordance with the approved blasting activity permit.

(6) For all incidents where explosives are loaded into boreholes and have had their functionality compromised by loading, handling or manufacturing defects, the permittee shall remove the explosives from the borehole or destroy them in place.

(7) The permittee may not allow explosives charges to remain in the ground for more than 1 year.

~~Subchapter J. CIVIL PENALTIES~~

~~See:~~

~~211.201. Scope.~~

~~211.202. Inspection—general.~~

~~211.203. Assessment of civil penalty.~~

~~211.204. System for assessment of penalties.~~

~~211.205. Procedures for assessment of civil penalties.~~

~~211.206. Final action.~~

~~211.207. Final assessment and payment of penalty.~~

~~§ 211.201. Scope.~~

~~—This subchapter applies to the assessment of civil penalties for the use of explosives on permitted blasting activity sites and for the unauthorized detonation, storage, transportation, handling or use of explosives. This subchapter does not apply in cases when the procedures in Chapter 77 or 86 (relating to noncoal mining; and surface and underground coal mining; general) are used.~~

~~§ 211.202. Inspection—general.~~

~~—When the Department determines that a person subject to this chapter has violated any provision of this chapter or a permit issued under this chapter, the Department will notify the alleged violator either by copy of an inspection report, a notice of violation, or through a Department order or other enforcement document. The failure of the Department to issue a notice of a violation may not be interpreted to be evidence of the absence of a violation. The Department will provide notices, orders or other public records for public inspection at the appropriate Department district office.~~

~~§ 211.203. Assessment of civil penalty.~~

~~—(a) The Department will assess a civil penalty for each violation which is included as a basis for a cessation order.~~

~~—(b) The Department may assess a civil penalty for each violation.~~

~~—(c) The amount of the civil penalty may not exceed \$10,000 per day for each violation.~~

~~§ 211.204. System for assessment of penalties.~~

~~—(a) The penalty per day for each violation may be set at any amount from \$0 through the maximum of \$10,000.~~

~~—(b) Civil penalties will be assessed based on the following criteria:~~

~~—(1) *Seriousness.* Up to \$10,000 per day for each violation will be assessed based on the seriousness of the violation, including:~~

~~—(i) Personal injury or death.~~

~~—(ii) Damage or injury to the lands or to the waters of the Commonwealth or their uses.~~

~~—(iii) The cost of restoration.~~

~~—(iv) A hazard to the health or safety of the public.~~

~~—(v) Private property damage.~~

~~—(vi) Government property damage.~~

~~—(vii) The interference with a person's right to the comfortable enjoyment of life or property.~~

~~—(viii) Unauthorized detonation of explosives.~~

~~—(2) *Culpability.* If the violation was caused, contributed to or allowed to continue due to negligence on the part of persons working on the blasting activity site, a penalty of up to \$2,000 per day for each violation will be assessed depending on the degree of negligence of the persons.~~

If the violation was willful or the result of reckless conduct on the part of the person working on the blasting activity permit site, or a result of unauthorized detonation, transportation, storage, handling or use of explosives, a penalty of up to the maximum of \$10,000 per day for each violation, but at least \$500, will be assessed. Blasting to intentionally cause private property damage, government property damage, personal injury or death will be assessed at the maximum of \$10,000 per day for each violation.

~~—(3) *Speed of compliance.* A credit will be given of up to \$1,000 per day for each violation based on the person's attempt to achieve rapid compliance after the person knew or should have known of the violation. If the violation is abated within the time period in an abatement order, a credit will not be given under this paragraph unless the violation is abated in the shortest possible time, in which case a credit of up to \$1,000 per day for each violation will be given. The credit will be available to offset only civil penalties assessed for the specific violation at issue.~~

~~—(4) *Cost to the Commonwealth.* A penalty may be assessed based on the costs expended by the Commonwealth as a result of the violation. The costs may include:~~

~~—(i) Administrative costs.~~

~~—(ii) Costs of inspection.~~

~~—(iii) Costs of the collection, transportation and analysis of samples.~~

~~—(iv) Costs of preventive or restorative measures taken to prevent or lessen the threat of damage to a property or environmental value, or to prevent or reduce injury to a person.~~

~~—(5) *Savings to the violator.* If the person who commits the violation gains economic benefit as a result of the violation, a penalty may be assessed in an amount equal to the savings up to the regulatory maximum for each violation.~~

~~—(6) *History of previous violations.* In determining a penalty for a violation, the Department will consider previous violations of the applicable laws for which the same person or municipality has been found to have been responsible in a prior adjudicated proceeding, agreement, consent order or decree which became final within the previous 1 year period on the permit where the violation has occurred. The penalty otherwise assessable for each violation will be increased by a factor of 5% for each previous violation. The total increase in assessment based on history of previous violation will not exceed \$1,000 per day for each violation.~~

~~—(i) A previous violation will not be counted if it is the subject of pending administrative or judicial review, or if the time to request the review or to appeal the administrative or judicial decision determining the previous violation has not expired.~~

~~—(ii) Each previous violation will be counted without regard to whether it led to a civil penalty assessment.~~

~~—(c) Whenever a violation is included as a basis for an administrative order requiring the cessation of a blasting operation, or for another abatement order, and if the violation has not been abated within the abatement period set in the order, a civil penalty of at least \$750 per day for each violation shall be assessed for each day during which the failure to abate continues. If the person to whom the order was issued files an appeal of the order with respect to the violation, the abatement period will be extended if suspension of the abatement requirement is ordered in a supersedeas order is issued by the EHB under §§ 1021.61—1021.64 (relating to supersedeas). In this case, the period permitted for abatement will not end until the date on which the EHB issues a final adjudication with respect to the violation in question or otherwise revokes the supersedeas order.~~

~~—(d) Each day of a continued violation of the acts, this chapter, or a permit, license or order of the Department issued under this chapter will be considered a separate violation for purposes of this chapter. The cumulative effect of a continued violation will be considered in assessing the penalty for each day of the violation.~~

~~—(e) If a penalty calculated under the criteria in this section would yield a penalty in excess of the regulatory maximum for a violation, the maximum penalty will be imposed for that violation. Separate violations occurring on the same day may each be assessed a penalty of up to the regulatory maximum. When violations may be attributed to two or more persons, a penalty of up to the regulatory maximum may be assessed against each person.~~

~~§ 211.205. Procedures for assessment of civil penalties.~~

~~—(a) Within 15 days of service of a notice of violation or order, the person to whom it was issued may submit written information about the violation to the Department and to the inspector who issued the order. The Department will consider any submitted information in determining the facts surrounding the violation and may revise a civil penalty calculated in accordance with the criteria in § 211.204(b) (relating to system for assessment of penalties), if the Department determines that, taking into account exceptional factors present in the particular case, the civil penalty is demonstrably unjust. The Department will not reduce the civil penalty on the basis of an argument that a reduction in civil penalty could be used to abate violations of the acts, this chapter, or a condition of a permit or exploration approval. The Department will explain and document the basis for every revision of a civil penalty in the records of the case. If the Department revises the civil penalty, the Department will use the general criteria in § 211.204(b) to determine the appropriate civil penalty. When the Department has elected to revise a civil penalty, the Department will give a written explanation of the basis for the revised civil penalty to the person to whom the order was issued.~~

~~—(b) The Department will serve a copy of the civil penalty assessment on the person responsible for a violation. This assessment will be served within the time in the applicable statute of limitations. Service will be by registered or certified mail, or by personal service. If the mail is tendered at the address in the permit, or at an address the person is located, and delivery is refused, or mail is not collected, the requirements for service will be deemed to have been met.~~

~~—(c) Upon written request of the person to whom the assessment was issued, the Department will arrange for an informal conference to review the assessment. The Department may also initiate an informal conference.~~

~~—(d) The procedures for informal assessment conferences are as follows:~~

~~—(1) The Department will assign a representative to hold the informal assessment conference. The informal assessment conference will not be governed by requirements for formal adjudicatory hearings, and may be held at any time at the convenience of the parties.~~

~~—(2) The Department will post notice of the time and place of the informal assessment conference at the regional or district office closest to the mine at least 5 days before the conference. Any person shall have a right to attend and participate in the conference.~~

~~—(3) The Department will consider all relevant information on the violation. After the informal assessment conference is held, the Department may do one of the following:~~

~~—(i) Settle the issues, in which case a settlement agreement will be prepared and signed by appropriate representatives of the Department and the person assessed the penalty.~~

~~—(ii) Affirm, raise, lower or vacate the penalty.~~

~~—(e) The Department representative may terminate the informal assessment conference when the representative determines that the issues cannot be resolved or that the person assessed is not diligently working toward resolution of the issues.~~

~~—(f) At formal review proceedings under § 211.206 (relating to final action), evidence as to statements made or evidence produced by one party at an informal assessment conference may not be introduced as evidence by another party or to impeach a witness.~~

~~—(g) The time for appeal from an assessment will not be stayed by the request for or convening of an assessment conference.~~

§ 211.206. Final action.

~~—(a) The person upon whom a civil penalty assessment has been served may file an appeal of the civil penalty assessment with the EHB in accordance with § 1021.52 (relating to timeliness of appeal). Prepayment of the civil penalty shall be made in accordance with § 1021.54a(a) and (d) (relating to prepayment of penalties). Payment under this section shall be cash in the form of certified check, treasurer's check, bank check or cashier's check, or a bond in the amount of the assessed civil penalty executed by a surety who is licensed to do business in this Commonwealth and who is otherwise satisfactory to the Department.~~

~~—(b) The Department will hold the payment of civil penalty in escrow pending completion of the administrative and judicial review process, at which time it will disburse the payment as provided in § 211.207 (relating to final assessment and payment of penalty).~~

~~—(c) An appeal from a penalty assessment will not be considered to be timely unless a properly executed appeal bond or cash equal to the full amount of the assessed penalty, or a verified statement that the appellant is unable to pay, is received by the Department within 30 days of the appellant's receipt of the assessment or reassessment.~~

~~—(d) A person may challenge either the fact of the violation or the amount of the penalty once an appeal of that issue has been perfected. In either challenge, the appellant will be bound as to actions of the Department which have become final under section 4 of the Environmental Hearing Board Act (35 P. S. § 7514). A final action includes a compliance order which has become final, even though the order addresses the same violation for which a civil penalty is assessed.~~

~~§ 211.207. Final assessment and payment of penalty.~~

~~—(a) If the person to whom a civil penalty assessment is served does not file an appeal of the penalty assessment as provided in § 211.206 (relating to final action), the penalty assessment will become final and the penalty assessed will become due and payable upon expiration of the time allowed to file the appeal.~~

~~—(b) If a party requests judicial review of an adjudication of the EHB, the initial payment of the penalty assessed will continue to be held in escrow until completion of the review.~~

~~—(c) If the final decision in the administrative and judicial review process results in an order reducing or eliminating the proposed penalty assessed under this chapter, the Department will, within 30 days of receipt of the order, refund to the person assessed all or part of the escrowed amount, with any interest accumulated by the escrow deposit.~~

~~—(d) If the final decision in the administrative and judicial review processes results in an order increasing the penalty, the person to whom the notice or order was issued shall pay the difference to the Department within 30 days after the order is mailed to the person.~~



pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

COMMENT AND RESPONSE DOCUMENT

HANDLING AND USE OF EXPLOSIVES

25 Pa. Code Chapters 210 and 211

46 Pa. B. 996 (October 3, 2015)

Environmental Quality Board Rulemaking #7-522
(Independent Regulatory Review Commission #3138)

List of Commentators on the Proposed Rulemaking

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Comments and Responses

1. **Comment:** Consider using existing Federal definitions and references to assure regulatory consistency. (3)(5)(8)

Response: Changes have been made to ensure that the final-form rulemaking does not conflict with any Federal regulations. The final-form rulemaking requires persons to comply with laws and regulations administered by the Federal Bureau of Alcohol, Tobacco, and Firearms and Explosives (ATF) and defines “explosives” consistent with ATF’s definition. The definition of blast area differs from the Mine Safety and Health Administration (MSHA) definition because Pennsylvania’s regulations apply to offsite effects as well as onsite effects. For mining sites, MSHA regulations apply, and for non-mining blasting sites Occupational Safety and Health Administration (OSHA) regulations apply. The rulemaking was revised to require that blast site warning signs be posted at all approaches to the blast site, the same requirement as OSHA. Section 211.117 (daily summary of magazine transactions) was changed by adding that the “daily summary of magazine transactions” required by 27 CFR 555.127 be made available to the Department on request, to be consistent with ATF requirements and for clarity.

2. **Comment:** Use the ATF definition to define explosives. (5)(8)

Response: The final-form rulemaking has been revised to incorporate the ATF definitions of “explosives” and “explosives materials” into the definition of “explosives.” This change is consistent with the current language in Chapters 210 and 211 and does not conflict with any Federal regulation. The definition was revised to define explosives as “Any chemical compound, mixture, or device, the primary or common purpose of which is to function by explosion.” The term includes, but is not limited to, dynamite and other high explosives, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, and igniters. The term includes all items in the “List of Explosive Materials” provided for in 27 CFR 555.23.”

3. **Comment:** The definition of mine opening blasting needs to be changed. (5)

Response: The proposed regulatory changes do not include the definition of mine opening blasting as further review would be required to determine the scope of an appropriate change. This definition was established in 2008 through the regulatory process after careful deliberation. Further, it matches the definition in Chapter 89.

4. **Comment:** The fee increases are excessive. (3)(4)(8)

Response: After careful consideration, the Department has removed the proposed fee schedule revisions. Fees will be addressed separately in a subsequent rulemaking.

5. **Comment:** Reword section 210.17(a) because it is confusing as currently worded. (5)

Response: The Department believes this provision is sufficiently clear. However, the Department has added “law enforcement” and removed “well perforation” and “seismic and pole line work” as blaster’s license categories.

6. **Comment:** The addition of “must” and “secured” to the proposed definition of Blast Area is adequate to meet the board’s intentions. Adding “the potential for” makes the requirement more stringent than Federal regulations. (1) (4)(6)

Response: The Department agrees with this comment and has removed “the potential for” from the blast area definition in the final-form regulations.

7. **Comment:** Please clarify the difference between the terms blaster and blaster-in-charge. (See § 211.121 and § 211.124.) (1)

Response: The term blaster is generic to refer to any individual who may detonate explosives. Blaster-in-charge is used to identify the one person who is responsible for a specific blast. Blaster-in-charge is a defined term in section 211.101 of the existing regulations.

8. **Comment:** Clarify in the definitions that “cube root scaled distance” is to be applied to demolition activity only. (3)

Response: The rulemaking has been clarified to describe what cube root scaled distance is to be used for. Section 211.124(a)(9) now reads “except for demolition blasting operations where the cube root scaled distance must be used.”

9. **Comment:** The definition of flyrock in section 211.101 needs to be changed. “Onto property neither owned nor leased by the permittee or its customer” needs to be removed from the definition. (7)

Response: In the proposed rulemaking, the intent was to ensure that the blaster/permittee had control over the area they needed to secure. After further analysis, it was determined that property control is complex and that in some cases neither the permittee nor their customer may have control over property that needs to be secured. Therefore, the phrase “Onto property neither owned nor leased by the permittee or its customer” has been deleted from the final-form regulations.

10. **Comment:** Remove “Unauthorized detonation of explosives”, “unauthorized handling and use of explosives” and “Unauthorized storage of explosives” because these create an unreasonable requirement. (3)(8)

Response: The regulation has been revised to remove “Unauthorized detonation of explosives,” “Unauthorized handling and use of explosives” and “Unauthorized storage of explosives.”

11. **Comment:** The proposed regulations provide for a permit or license block. We request clarification as to the time frame of a permit or license block. (1)(4)(6)(8)

Response: When a permit or license block is applied, it is done through an order, which is an appealable action. A permit or license block is applied on a case-by-case basis if the permittee or licensee has demonstrated an unwillingness or inability to comply with regulations. A formulaic approach to blocking of permits or licenses which considers number of violations over set time frames has the potential to be more burdensome to the explosives industry and to the Department.

12. **Comment:** Remove section 211.115 as requirements set by ATF, OSHA, MSHA, Department of Transportation (DOT) and Homeland Security are already in place and proven to be effective. (5)

Response: This is beyond the scope of the proposed regulatory changes. The proposed rulemaking did not include modifications to § 211.115 other than the addition of § 211.115(j) which ensures that explosives magazines are accessible to the Department for inspection. It is important for the Department to retain the authority to enforce these requirements because the Department's inspectors conduct inspections to assure compliance more frequently than the Federal partner agencies.

13. **Comment:** The requirement for a 4-hour time limit for the Department to be given access to explosives magazines for inspection may not always be feasible. (3)(4)(7)

Response: The proposed change to the regulations states that "Department access to the magazines shall be granted within 4 hours of a Department request or within a time frame agreed upon by the Department representative and the magazine licensee." If the 4-hour time limit is not feasible, the licensee should propose a different time frame to the Blasting and Explosives Inspector.

14. **Comment:** Eliminate section 211.116 regarding decommissioning of magazines as this entire section is redundant due to Federal regulations and will create a burden to comply. (3)

Response: When magazines are no longer being used or storage licenses have expired, it is important that the Department ensures the explosives are removed from the magazine and properly disposed. The disposal of explosives is regulated in part by storage regulations which generally require that explosives are either being used, handled, or stored. Therefore, this section has been retained in the final-form rulemaking.

15. **Comment:** Delete sections 211.122 and 211.123 (requiring explosives sales and purchase permits) as they are redundant due to Federal regulations. (3)(5)

Response: These sections were proposed for deletion with the proposed rulemaking. The final-form rule reflects this deletion.

16. **Comment:** Please provide clarification on how to provide distance, direction and mapping information if multiple blasts are planned on a Blasting Activity Permit. (1)(4)(6)(8)

Response: When a Blasting Activity Permit application is reviewed, the Department must consider if it is reasonable that the activity can be conducted in compliance with the regulations. The distance and direction of blasting is to be conducted from roads; buildings and other structures are the critical factors considered in how blasts are designed. Therefore, these are shown on the maps submitted with the permit applications. A map for the area where blasting is proposed meets the regulatory requirement.

17. **Comment:** It must be made clear that electronic signatures will be accepted for Blasting Activity Permit applications. (3)(8)

Response: Existing regulations allow the Department to accept electronic signatures. The acceptance of electronic signatures is subject to the Commonwealth Electronic Transactions Act (73 P.S. §§ 2260.101—2260.5101).

18. **Comment:** Why must the specific type of explosives be listed on a Blasting Activity Permit application? (3)

Response: For Blasting Activity Permit applications it is relevant for the Department to know if, for example, packaged or bulk blasting agents are proposed for use. In some cases, it is relevant if electronic detonators are going to be used instead of non-electric detonators. “Specific” in this context does not include brand names or other unnecessarily detailed information.

19. **Comment:** We provide a map now with Blasting Activity Permit applications. Is it necessary or required to add arrows and footage distances to each item listed? (3)

Response: It may not be necessary to add arrows and “footage distances” to maps. However, many of the maps currently provided with Blasting Activity Permit applications lack sufficient detail to be useful in evaluating if there is a reasonable expectation that the blasting proposed in the application can be done within regulatory limits. To make a fair determination, the Department needs to be able to assess spatial relationships and distances between where blasting will occur and where buildings, roads, etc. are located.

20. **Comment:** The requirement to provide notification to people within 200 feet of blasting has worked fine. Increasing the distance can cause unnecessary or excessive burden and cost to contractors. (3)(8)

Response: The requirement for notification has been removed. After further consideration, the proposed requirement was determined to be less effective than other regulatory requirements in ensuring public safety. Clearing and securing the blast area, an existing requirement, is more effective than warning people who may be within 200 feet of a blast. If people are close enough to where blasting is going to take place that they need to

be warned, the area they are in needs to be cleared and secured. The distance from the blast that needs to be cleared and secured is determined by blast design. If a blaster or permittee can only clear and secure a small area, the blast must be designed accordingly.

21. **Comment:** Will a digital/electronic version such as EX smart phone, iPad, laptop, etc. be accepted to comply with the requirement for a blaster to have a copy of the Blasting Activity Permit? (3)(8)

Response: Yes. A copy of the permit needs to be made available to the blaster-in-charge. To demonstrate compliance with this provision of the proposed regulation the blaster-in-charge would only have to show the blasting inspector that he has a copy of the permit. An electronic copy is acceptable. The regulation does not specify the format.

22. **Comment:** DEP occasionally requests the permit application be submitted on paper. In those instances, will the applicant be eligible for the reduced "online" cost? (3)

Response: Applicants who submit a paper permit application are not eligible to receive the reduced "online" cost. The reason that some Blasting Activity Permits need to be submitted on paper instead of electronically is because those projects are sufficiently complex and the information is too voluminous to be submitted to the Department electronically. These complex projects, such as demolition or seismic exploration operations, require significantly more review time than typical Blasting Activity Permits and are typically large, complex and big budget projects.

23. **Comment:** How are the fees for Blasting Activity Permits required by section 211.126 going to be paid in a timely manner? (3)

Response: After careful consideration, the Department has removed the proposed fee schedule revisions. Fees will be addressed separately in a subsequent rulemaking.

24. **Comment:** While we agree that it is reasonable for DEP to collect fees for reviewing, administering and enforcing the blasting program, as supported by regulation, and in a manner consistent, efficient and equitable, we request clarification as to the actual cost of the blasting program and a listing of DEP personnel assigned to the program with their associated yearly hours. We also suggest that a more efficient, long-term solution to the fees is the use of the Consumer Price Index (CPI) average for All-Urban Consumers for the most recent calendar year, adjusted annually by the percentage, either upward or downward by which the CPI for the most recent calendar year exceeds the CPI for the previous calendar year. This is the CPI currently utilized by DEP Air Quality's Title V program.

Furthermore, in support of DEP's transparency policy and to provide a baseline of the Blasting Program operations, we request a yearly report on blasting be a part of an overall Mining Program financial statement report to be completed no later than December 31 of the most recent fiscal year. (1)

Response: After careful consideration, the Department has removed the proposed fee schedule revisions. Fees will be addressed separately in a subsequent rulemaking.

25. **Comment:** Under the proposed regulations it appears as though there is no difference between a license for the use of explosives for construction or mining blasting and one for detonation of an explosive for law enforcement purposes. Municipal bomb squad personnel should be properly licensed, yet their activities should not be regulated in the same matter as persons conducting blasting operations. (2)(8)

Response: Bomb squad members and other police who have blaster's licenses are not required to have blaster's licenses as the activities they engage in involving explosives, except storage, are not regulated by the Department. They obtain blaster's licenses because they wish to have a credential and better understand how explosives storage, handling and use is regulated in the Commonwealth. A law enforcement classification for blaster's licenses will be used for these activities.

26. **Comment:** The proposed regulation should require maintaining accurate sales and purchase records in accordance with Federal regulations. (5)

Response: The proposed regulations remove the requirements for Department sales and purchase permits in order to avoid duplicating Federal requirements.

27. **Comment:** The final-form regulation should be changed to state "the latitude and longitude, and where available, the 911 address should be included" because a house may have an address but not everyone posts those addresses in a readily visible or accessible manner. (3)

Response: The final-form rulemaking has not been revised in response to this comment. Street addresses are readily available through tools such as Google Earth. The regulation change includes that "if monitoring is conducted at a home or other building with a 911 address, the address of the structure must be provided" so if there is no 911 address it does not need to be provided. Providing a street address removes all doubt regarding locational information on a blast report and provides information to a blaster in the field designing a subsequent blast without access to a mapping program. Modern GPS units, if properly used, are the most consistent and accurate method of obtaining locational information such as distances and direction. That information can then be applied to maps using mapping programs which is very useful in any investigation into what may have occurred as a result of a blast.

28. **Comment:** The final-form regulation should be changed to allow the electronic signature of the blaster-in-charge on the blast record. (5)

Response: Existing regulations allow the Department to accept for electronic signatures. The acceptance of electronic signatures is subject to the Commonwealth Electronic Transactions Act (73 P.S. §§ 2260.101—2260.5101).

29. **Comment:** The requirement for describing the ground surrounding the blast site on the blast record sketch showing the number of blast holes, burden, spacing, pattern dimensions, delay timing sequence, and point of initiation should be removed. (3)

Response: Most blast reports prepared by blasters in Pennsylvania describe the condition of the ground surrounding the blast site as, for example, previous shot, solid, open, etc. This information is valuable to understand the effects resulting from a blast when Department investigations are conducted and aids in making determinations for blasters to modify blast designs if necessary or for the Department to evaluate proposed blast design modifications. Examples have been included in the final-form rulemaking to improve clarity.

30. **Comment:** Change the proposed requirement to provide the amount of explosives in each hole on the blast record to require compliance with Federal and industry guidelines for loading or delete the requirement. (5)

Response: ATF, OSHA, and MSHA do not require blast reports. The Federal Office of Surface Mining Reclamation and Enforcement's (OSMRE) regulations require blast reports for coal mines and in 30 CFR§816.68(h), (i) and (j) they include that the diameter and depth of holes, types of explosives used and the type and length of stemming be provided on the record. "The amount of explosives loaded in each borehole" was added to the final-form rulemaking to clarify that the information obtained from logging of the blast hole during loading required in the current regulation be added to the blast report. This information is necessary to comply with the general requirement to provide the Department with sufficient information to reconstruct the blast.

31. **Comment:** The requirement in the proposed regulation should be to provide either the street address or the latitude, not both. (7)

Response: Modern GPS units, if properly used, are the most consistent and accurate method of obtaining locational information such as distances and direction. Online tools allow for data collection that can be applied to maps to obtain locational information.

32. **Comment:** There should not be a requirement for a log of holes drilled but not loaded on the blast record drill log. (7)

Response: On most drill logs that are currently attached to blast records, the condition of all holes drilled on the blast site is reported. This is necessary because it provides information about the condition and the extent of the rock being blasted, which is important information for both the blaster and the Department to evaluate why a blast performed the way it did.

33. **Comment:** The proposed regulation should be changed to require that the blaster-in-charge shall determine the condition of the material to be blasted by consulting with the driller, information from the drill log, or "at-the-hole" communication with others familiar with the specific drilling process prior to loading the holes. (3)

Response: This requirement in section 211.133(a)(26) of the proposed regulation refers to providing drill log information for a blast report so that blast performance can be adequately evaluated. The condition of the boreholes and how the holes were loaded in response to their condition is necessary when reconstructing the blast and to understand why a blast performed as it did.

34. **Comment:** Relating to section 211.133(a)(14), it is unreasonable to provide the density for gassed emulsions. Gassed emulsions have variable densities which are always changing in the borehole up to the point of detonation. The exact product density, for these types of explosives is unknown causing it to be difficult to determine the amount of this product placed into a borehole. (7)

Response: The final-form rulemaking requires the “product density for bulk blasting agents.” Since gassed emulsions have variable densities, providing a range complies with the requirement.

35. **Comment:** Section 211.141 (13) should be changed to state only load explosives into on-road vehicles that have passed Federal Motorized Carrier Safety Administration (FMCSA) (under DOT) safety inspection or certification because explosives trucks may be licensed other states. (1) (3)

Response: The final-form rulemaking has been revised to change “the State safety inspection” to a “State or an FMSCA inspection.”

36. **Comment:** We ask for clarification and a clear definition of a “nuisance.” (1)(3)(4)(5)(6)(7)(8)

Response: The final-form rulemaking reflects the removal of the definition of “nuisance” and the requirement to prevent a nuisance.

37. **Comment:** Proposed section 211.151(e) should be changed to include that an alternative peak particle velocity or air blast level can be “designated by the Department unless the building is owned or leased by the permittee or customer, or granted via DEP approved variance.” (3)

Response: The regulations provide for alternative airblast levels in section 211.151(f).

38. **Comment:** Please clarify the difference between noxious and toxic gases. (1)(8)

Response: Neither “noxious” nor “toxic” are necessary descriptions of the gases produced by blasting from a regulatory standpoint. The final-form rulemaking removes both terms.

39. **Comment:** Section 211.152 is too broad and should be deleted. (5)

Response: The Department retained section 211.152. As provided in the proposed

rulemaking, the Department modified this section by adding “including carbon monoxide (CO) and oxides of nitrogen (NOx),” changing “health and safety” to “health or safety”, and replacing “noxious” with “toxic”. As the Department notes above in its response to Comment 38, neither “noxious” nor “toxic” are necessary descriptions of the gases produced by blasting from a regulatory standpoint. The final-form rulemaking removes both terms. The remaining edits are clarifications of provisions that have been in place since July 2001.

40. **Comment:** The term blaster-in-charge should be defined. (5)

Response: Blaster-in-charge is a defined term in Section 211.101 of the existing regulations.

41. **Comment:** We request a clearer definition of the responsibilities regarding the determination of the condition of bore holes prior to loading including a description of “at-the-hole communication.” (1) (6)

Response: It is the blaster-in-charge’s responsibility to determine the condition of the material to be blasted from the individual who drilled the blast holes, from the drill log, or at-the-hole communication prior to loading a blast. It is the permittee’s responsibility to ensure that a written drill log or at-the-hole communication is available to the blaster-in-charge. The final-form regulation defines “at-the hole-communication” as “communication between the driller who drilled the blast holes to be loaded in a blast and the blaster-in-charge of that blast in which the driller describes the conditions of the boreholes that the driller drilled. At-the-hole communication occurs prior to blast loading and may consist of but not be limited to the following: cones placed in the boreholes with messages describing borehole conditions or verbal communication in which the driller describes the condition of the boreholes.”

42. **Comment:** Clearing and safeguarding the blast area should be the responsibility of the permittee. (5)

Response: Clearing and safeguarding the blast area is a shared responsibility of the permittee, the blaster-in-charge, and where applicable, the contract blaster. Blast areas are usually sufficiently large that it requires coordination and communication between all parties to secure them and that effort should be coordinated by the permittee who shares the responsibility of securing the blast area with the blaster. Each party has knowledge and expertise that must be communicated and coordinated in order to provide the needed level of security.

43. **Comment:** The proposed requirements regarding blast site signs are confusing and conflict with Federal requirements. We suggest wording to say "adequate signage" at the safest, most logical, and most convenient location. (3)(4)(6)(7)(8)

Response: The final-form rulemaking has been revised to reflect OSHA rules and will state “warning signs shall be maintained at all approaches to the blast site.” The final-form

rulemaking revision also states that posting of warning signs must be in compliance with OSHA and MSHA regulations. The requirement for posting signs was moved to section 211.154 (relating to preparing the blast) from section 211.155 (relating to preblast measures) to clarify that signs need to be posted prior to blast loading which is consistent with Federal regulations.

44. **Comment:** The requirements for deployment of seismographs should be changed to “established by the International Society of Explosives Engineers Standards Committee and/or manufacturer’s recommendations.” (3)(5)

Response: The ISEE standards are developed by professionals who represent the explosives industry and account for the manufacturer’s recommendations. Maintaining one set of standards will prevent confusion and will be easier to follow. Therefore, the Department did not add this to the regulation.

45. **Comment:** The requirement to use 3-inch diameter holes in section 211.182 (c) should be eliminated. (3)

Response: The proposed rulemaking eliminated the 3-inch hole diameter requirement. This final-form rulemaking reflects this elimination.

46. **Comment:** The imposition of an entirely new civil penalty structure exceeds the reasonable powers of the board. The existing legal framework applicable to blasting contractors is adequate to protect Pennsylvania citizens. The proposed regulations do not establish why Subchapter J is necessary, nor do they accurately weigh the costs and benefits of Subchapter J. As drafted, the proposed rule imposes penalties that are too burdensome, gives undue discretion to investigators, and creates a standard of proof that is contrary to established jurisprudence. (3)(8)

Response: After careful consideration, the Department has removed Subchapter J from this rulemaking. Civil penalties for non-mining explosives violations will be addressed separately in subsequent rulemaking.

47. **Comment:** In section 211.204 (b)(1)(vii) “the interference with a person’s right to the comfortable enjoyment of life or property” is problematic. We believe this cannot be able to be measured consistently, equitably or without personal bias and request that it be removed from the proposed rulemaking. (1)(4)(6)

Response: Subchapter J has been removed from this rulemaking.

48. **Comment:** Relating to section 211.204(b)(4) (Cost to the Commonwealth), a penalty may be assessed based on the costs expended by the Commonwealth as a result of the violation. We ask for clarification as to how this section will be assessed. As written there is no limitation on costs or how they will be determined. (1)(4)(6)

Response: Subchapter J has been removed from this rulemaking.

49. **Comment:** Regarding section 211.204 (e), if a penalty calculated under the criteria in this section would yield a penalty in excess of the regulatory maximum for a violation, the maximum penalty will be imposed for that violation. Separate violations occurring on the same day may each be assessed a penalty of up to the regulatory maximum. When violations may be attributed to two or more persons, a penalty of up to the regulatory maximum may be assessed against each person. We ask for clarification on “attributed to.” Will this be applied to the blaster-in-charge, permittees, blasting crew, etc.? (6)

Response: Subchapter J has been removed from this rulemaking.

50. **Comment:** Regarding section 211.204 (System for assessment of penalties), what is the basis for the "per-day" charges as it relates to blasting incidents? They generally are singular events. Will there be a clear breakdown for monetary assessment of each criteria category in 211.204 (b). How will each of the six categories be measured? Will positive history of no violations be included? Will an assessment worksheet be created? (6)

Response: Subchapter J has been removed from this rulemaking.

51. **Comment:** The regulations specify that “the permittee, all subcontractors listed on the permit and the blaster-in-charge of any blasts conducted on a permit shall comply with the approved application, the permit and this chapter.” Civil penalties could be assessed to one or all of the permittee, all subcontractors listed on the permit and the blaster-in-charge of any blasts conducted on a permit.” Prior to implementation of the regulations the Department will develop penalty assessment guidelines and will solicit input from the regulated community. This is too wide open to abuse of its intent. There are no limitations. Who will do this and how will this be determined? (6)

Response: Subchapter J has been removed from this rulemaking.

52. **Comment:** Specify which document has preeminence when dealing with other agencies, MSHA, Fire Marshal or OSHA (5)(8)

Response: The Department’s regulations must be complied with, regardless of other regulations. Blasting is complex and ultra-hazardous and is highly regulated. It is of the utmost importance that the regulations provide for public protection. Every effort has been made to assure consistency in the requirements.

53. **Comment:** Add a statement clarifying if any “adopted by reference” laws come into play. (5)

Response: The final-form rulemaking makes clear that Chapters 210 and 211 require compliance with relevant Federal laws, including those of the ATF (18 U.S.C.A. Chapter 40 and implementing regulations at 27 CFR Part 555), and, where applicable, those of OSHA, MSHA, and the FMCSA.

54. **Comment:** The regulatory analysis form (RAF) does not provide the necessary explanation of the need for these regulations. Nor does the RAF adequately explain the cost benefit analysis for the fee increases. (8)

Response: After careful consideration, the Department has removed the proposed fee schedule revisions. Fees will be addressed separately in a subsequent rulemaking.

55. **Comment:** Regarding section 211.151 (relating to prevention of damage or injury), subsection (d) addresses how blasts shall be designed and conducted. EQB proposes to modify the phrase “maximum allowable peak particle velocity” to “allowable particle velocity,” but then uses the phrase “maximum allowable peak particle velocity” in the last sentence. EQB uses this same phrase in Subsection (g). EQB should review this section to ensure the language is consistent and clear for the regulated community to comply. (8)

Response: The regulation has been revised to state “particle velocity” instead of “peak particle velocity” throughout the final-form rulemaking.



March 16, 2018

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

Re: Final Rulemaking: Handling and Use of Explosives (#7-522)

Dear Mr. Sumner:

Pursuant to Section 5(a) of the Regulatory Review Act, please find enclosed a copy of a final-form rulemaking for review and comment by the Independent Regulatory Review Commission (IRRC). The Environmental Quality Board (Board) adopted this rulemaking at its February 20, 2018 meeting.

This final-form rulemaking amends the explosives regulations at 25 Pa. Code Chapter 210 (relating to blasters' licenses) and 25 Pa. Code Chapter 211 (relating to storage, handling and use of explosives). The regulations are authorized under the 1937 and 1957 Explosives Acts, the Surface Mining Conservation and Reclamation Act, the Noncoal Surface Mining Conservation and Reclamation Act and the Administrative Code of 1929.

The final-form rulemaking revises current regulations to address the use of explosives for seismic exploration. The use of explosives for seismic exploration is fundamentally different than most other uses of explosives. One primary difference is that with seismic exploration, it is often necessary for explosive charges to remain in the ground for extended periods of time. The final-form rulemaking specifies the security measures needed to protect the public safety under these circumstances. The Department of Environmental Protection (DEP or Department) developed an interim seismic supplement to address safety issues at seismic exploration sites. This final-form rulemaking codifies these requirements, providing certainty to the regulated community regarding the regulatory framework for seismic exploration.

The final-form rulemaking also updates explosives use requirements to reflect current practices, eliminates outdated requirements, and provides for more effective enforcement. These updates will result in more consistency between the requirements for construction blasting and blasting for mining operations. The final-form rulemaking removes the proposed revisions to the fee schedule that would cover costs associated with various permit-related work, license renewals, and required on-site safety inspections. The final-form rulemaking also removes the proposed Subchapter J (relating to Civil Penalties). The fee schedule and the requirements for civil penalties will be pursued in a subsequent rulemaking.

Approximately 2,000 individual licensed blasters in Pennsylvania will be required to comply with this final-form rulemaking. Also, there are approximately 450 companies, many of which are small businesses, storing explosives or conducting blasting operations in Pennsylvania that will be subject to this final-form rulemaking. The bulk of the activity in Pennsylvania is conducted by large corporations, including several multinational corporations. It is important to note that these regulations will apply consistently among all operations for small and large businesses alike. The impacts of blasting are the same, no matter if a large or small business is conducting the activity, so all businesses will be held to the same level of accountability.

The final-form rulemaking deletes obsolete requirements for permits related to the purchase and sale of explosives. It also improves public safety and provides for more complete documentation of blasting activities. The addition of a specific subchapter for seismic exploration provides clarity for this activity and relief from requirements that cannot be met by that segment of the regulated community, while providing alternatives that protect public safety.

The additional improvements and clarifications in the final-form rulemaking are not expected to significantly increase costs and should in some instances provide a cost savings to the regulated community. Removing the state permitting requirement for the sale and purchase of explosives, as well as requirements to track those transactions, will result in cost savings for the regulated community. Any additional compliance costs that may result from site-specific factors that raise public safety concerns are highly variable and difficult to predict.

In sum, compliance with the final-form rulemaking is expected to be seamless since many of the more stringent requirements are in place through permitting or are incremental changes to the existing requirements. Compliance assistance for this final-form rulemaking will be provided through routine interaction with trade groups and individual applicants.

This rulemaking was published as proposed on February 27, 2016 at 46 Pa.B. 996, opening a 30-day public comment period. Comments were received from seven public commentators and from IRRC. Commentators suggested that additional references to the federal regulations were appropriate in order to provide clarity and consistency. Commentators also indicated concern regarding the fee increases. Comments were received about the blast record requirements specified in § 211.133. These were related to electronic signatures, the description of the ground in the area of the blasting, the amount of explosives in each hole, addresses, and drill logs. A commentator noted concern regarding the creation of a civil penalties program. A number of comments requested clarifications. The final-form rulemaking reflects revisions made in response to these comments.

DEP reviewed both the proposed and final-form rulemaking with the Mining and Reclamation Advisory Board and the Aggregate Advisory Board since the mining regulations require compliance with Chapters 210 and 211. Outreach with the broader explosives regulated community was accomplished through presentations to the Pennsylvania chapters of the International Society of Explosives Engineers and the trade group representing the seismic exploration contractors. Informal discussions were also held with individual stakeholders. As a result of the outreach, no concerns were presented during the public comment period by seismic operators or construction contractors.

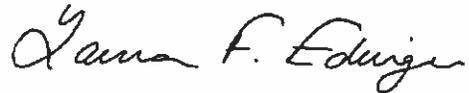
Mr. David Sumner, Executive Director - 3 -

March 16, 2018

The Department will provide assistance as necessary to facilitate IRRC's review of the enclosed rulemaking under Section 5.1(e) of the Regulatory Review Act.

Please contact me by e-mail at ledinger@pa.gov or by telephone at 717.783.8727 if you have any questions or need additional information.

Sincerely,

A handwritten signature in cursive script that reads "Laura F. Edinger".

Laura Edinger
Regulatory Coordinator

Enclosure



**TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO
THE REGULATORY REVIEW ACT**

I.D. NUMBER: 7- 522
 SUBJECT: Handling and use of Explosives
 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 Tolerated Regulation
 - a. With Revisions
 - b. Without Revisions

RECEIVED
 IRRC
 2018 MAR 16 P 12: 29

FILING OF REGULATION

DATE	SIGNATURE	DESIGNATION
<u>3/16/18</u>	<u>Melly Weaver</u>	Majority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY <u>Representative John Maher</u>
<u>3/16/18</u>	<u>Sandy Nitzberg</u>	Minority Chair, HOUSE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY <u>Representative Mike Carroll</u>
<u>3/16/18</u>	<u>Michael...</u>	Majority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY <u>Senator Coline Yaw</u>
<u>3/16/18</u>	<u>Carly Simpson</u>	Minority Chair, SENATE COMMITTEE ON ENVIRONMENTAL RESOURCES & ENERGY <u>Senator John Yudichak</u>
<u>3/16/18</u>	<u>K Cooper</u>	INDEPENDENT REGULATORY REVIEW COMMISSION <u>David Sumner</u>
_____	_____	ATTORNEY GENERAL (for Final Omitted only)
_____	_____	LEGISLATIVE REFERENCE BUREAU (for Proposed only)

