

**INDEPENDENT REGULATORY
REVIEW COMMISSION**

Regulatory Analysis Form

(Completed by Promulgating Agency)

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

(1) Agency: Department of Environmental Protection

IRRC Number: **3138**

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

(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):

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(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: