CHAPTER 211. STORAGE, HANDLING AND USE OF EXPLOSIVES

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Authority
The provisions of this Chapter 211 issued under sections 1901-A and 1920-A of The Administrative Code of 1929 (71 P. S. §§ 510-1 and 510-20); amended under sections 3 and 7 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); Reorganization Plan No. 8 of 1981 (71 P. S. § 751-35); section 2(f) of the act of May 18, 1937 (43 P. S. § 25-2(f)); Reorganization Plan No. 2 of 1975 (71 P. S. § 751-22); section 4(b) of the Surface Mining Conservation and Reclamation Act (52 P. S. § 1396.4(b)); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P. S. § 3311(e)); and sections 1917-A and 1920-A(b) of The Administrative Code of 1929 (71 P. S. §§ 510-17 and 510-20(b)), unless otherwise noted.

Source
The provisions of this Chapter 211 adopted June 14, 1972, effective June 15, 1972, 2 Pa.B. 1067, unless otherwise noted.

Cross References

Subchapter A. GENERAL PROVISIONS

Sec.
211.1 and 211.2. [Reserved].
211.31. [Reserved].
211.32—211.44. [Reserved].
211.51—211.56. [Reserved].
211.61 and 211.62. [Reserved].
211.71. [Reserved].
211.72. [Reserved].
211.73—211.76. [Reserved].
211.81—211.87. [Reserved].
211.88. [Reserved].
211.101. Definitions.
211.102. Scope.
211.103. Enforcement.

Cross References
This subchapter cited in 25 Pa. Code § 211.191 (relating to scope).
§§ 211.1 and 211.2. [Reserved].

Source
The provisions of these §§ 211.1 and 211.2 reserved July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751. Immediately preceding text appears at serial pages (243466) to (243469).

§ 211.31. [Reserved].

Source

§§ 211.32—211.44. [Reserved].

Source
The provisions of these §§ 211.32—211.44 reserved July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751. Immediately preceding text appears at serial pages (243469) to (243482).

§§ 211.51—211.56. [Reserved].

Source
The provisions of these §§ 211.51—211.56 reserved July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751. Immediately preceding text appears at serial pages (243481) to (243490).

§§ 211.61 and 211.62. [Reserved].

Source
The provisions of these §§ 211.61 and 211.62 reserved July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751. Immediately preceding text appears at serial pages (243490) to (243495).

§ 211.71. [Reserved].

Source
The provisions of this § 211.71 reserved October 15, 1982, effective October 16, 1982, 12 Pa.B. 3736. Immediately preceding text appears at serial page (11436).

§ 211.72. [Reserved].

Source

§§ 211.73—211.76. [Reserved].
§§ 211.81—211.87. [Reserved].

Source
The provisions of these §§ 211.81—211.87 reserved July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751. Immediately preceding text appears at serial text pages (243497) to (243499).

§ 211.88. [Reserved].

Source

§ 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.


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

**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 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 must be cleared and secured to prevent injury to persons and damage to property.

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

**Blaster**—An individual who is licensed by the Department under Chapter 210 (relating to blasters’ licenses) to detonate explosives and supervise blasting activities.

**Blaster-in-charge**—The blaster designated to have supervision and control over all blasting activities related to a blast.

**Blasting activity**—The actions associated with the use of explosives from the time of delivery of explosives to a worksite until all postblast measures are taken, including priming, loading, stemming, wiring or connecting, detonating, and all necessary safety, notification and monitoring measures.
Building—A structure that is designed for human habitation, employment or assembly.

Charge weight—The weight in pounds of an explosive charge.

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 (Ds1/3)—A value calculated by using the formula $\text{Ds}^{1/3} = \frac{D}{(\text{cube root}) W}$, 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.

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 in 27 CFR 555.23 (relating to list of explosive materials).

FMCSA inspection—The inspection required by the Federal Motor Carrier Safety Administration in 40 CFR 396.3 (relating to inspection, repair, and maintenance).

Flyrock—Overburden, stone, clay or other material cast from the blast 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) 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 Conservation and Reclamation Act (52 P.S. §§ 3301—3326).

Indoor magazine—A magazine located entirely within a secure intrusion-resistant and theft-resistant building which is primarily used for commercial or industrial purposes.
Inner perimeter security—Measures taken to increase the intrusion resistance and theft resistance of a magazine that encircles an individual or a group of magazines. These measures lie within the outer perimeter security measures.

MSHA—The United States Department of Labor, Mine Safety and Health Administration.

Magazine—A structure used for the storage of explosives.

Misfire—Incomplete detonation of explosives.

OSHA—The United States 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.

Outer perimeter security—Measures taken to increase the intrusion resistance of magazines that encircle the area where the magazines are situated.

Particle velocity—A measure of the intensity of ground vibration, specifically the time rate of change of the amplitude of ground vibration.

Peak particle velocity—The maximum intensity of particle velocity.

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.

Square root scaled distance (Ds)—A value calculated by using the formula $Ds = \frac{D}{\sqrt{W}}$, 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.

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.

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.
Authority

The provisions of this § 211.101 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source


§ 211.102. Scope.

(a) This chapter applies to persons using or storing explosives and engaging in blasting activities in this Commonwealth. Persons 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 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 blasting activities from compliance with other applicable laws or regulations of the Commonwealth.

Authority

The provisions of this § 211.102 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source

§ 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, 88 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.

Authority
The provisions of this § 211.103 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source
Subchapter B. STORAGE AND CLASSIFICATION OF EXPLOSIVES

Sec.
211.111. Scope.
211.112. Magazine license and fees.
211.113. Application contents.
211.114. Displaying the license.
211.115. Standards for classifying and storing explosives and constructing, maintaining and siting magazines.
211.116. Decommissioning magazines.
211.117. Daily summary of magazine transactions.

Source
The provisions of this Subchapter B adopted July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751, unless otherwise noted.

Cross References
This subchapter cited in 25 Pa. Code § 211.141 (relating to requirements); and 25 Pa. Code § 211.191 (relating to scope).

§ 211.111. Scope.
(a) This subchapter applies to the classification and storage of explosives. It establishes the requirements, procedures and standards for licensing, constructing, and siting and maintaining magazines.
(b) Persons storing explosives underground in permitted underground mines are exempt from this subchapter.

Source
The provisions of this § 211.111 amended June 17, 2005, effective June 18, 2005, 35 Pa.B. 3409. Immediately preceding text appears at serial page (281302).

§ 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.
(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.
(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 the expiration date, the licensee may continue to operate under the current license until the Department acts on the renewal application.

(e) License fees are as follows:

1. License:
   (i) Application—$50
   (ii) Site inspection—$50

2. License modifications—$50
3. License renewals—$50
4. License transfers—no fee

Authority

The provisions of this § 211.112 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source

The provisions of this § 211.112 amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial page (311865).

§ 211.113. Application contents.

(a) An application to obtain, renew, modify or transfer a magazine license must be on forms approved by the Department. Before the Department issues, renews, transfers or modifies a license, the application must demonstrate that the applicant has complied with the applicable requirements of this chapter.

(b) A completed license application must include all of the following:

1. The applicant’s name, address, telephone number and ATF license or permit number.
2. A contact person, including name, title and telephone number.
3. The types and quantities of explosives to be stored within the magazine.
4. A map, plan or a sketch of the site location showing the nearest buildings, nearest railways, nearest highways, existing barricades, if any, and proposed barricades.
5. A plan showing the design and specifications of the magazine to be licensed.

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(6) A plan showing the design, specifications, dimensions and locations of all security measures to be installed under § 211.115(d) (relating to standards for classifying and storing explosives and constructing, maintaining and siting magazines).

(7) The latitude and longitude of outdoor magazines except for Type 3 magazines as defined in 27 CFR 555.203(c) (relating to types of magazines).

(8) The latitude and longitude of indoor magazines containing high explosives.

(c) A license renewal application must include all of the following:

(1) The applicant’s name, address and telephone number.

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

(3) The maximum amount and type of explosives for which the magazine is currently licensed.

Authority

The provisions of this § 211.113 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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. § 751-22).

Source

The provisions of this § 211.113 amended June 17, 2005, effective June 18, 2005, 35 Pa.B. 3409; amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial pages (311865) to (311866).

Cross References

This section cited in 25 Pa. Code § 211.115 (relating to standards for classifying and storing explosives and constructing, maintaining and siting magazines).

§ 211.114. Displaying the license.

The magazine license, or a legible copy of the license, shall be conspicuously displayed. If possible, the license shall be displayed inside the magazine. In all other cases, the license shall be displayed at the site and adjacent to the magazine to which it applies.

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

(a) The provisions of 27 CFR Part 555, Subpart K (relating to storage), are incorporated herein by reference. If any provision of 27 CFR Part 555, Subpart
K addresses an issue addressed in this section, the more stringent provision applies. These provisions shall be used to:

1. Classify explosives.
2. Determine which class of explosives may be stored in each type of magazine.
3. Determine the quantity of explosives that may be stored.
4. Determine the applicable construction standards for each type of magazine.
5. Site the magazine.
7. Grant variances.

(b) For purposes of incorporation by reference of 27 CFR Part 555, Subpart K, the term “Department” is substituted for the term “director” and the term “representatives of the Department” is substituted for the term “ATF Official.”

(c) Indoor magazines shall be located in buildings which are in compliance with all applicable building codes and other applicable regulations

(d) Persons storing only display fireworks in Type 4 magazines as defined in 27 CFR 555.203(d) (relating to types of magazines) are exempt from this subsection except for paragraphs (8) and (9). Type 3 magazines as defined in 27 CFR 555.203(c), are exempt from this subsection. The following security measures apply to outdoor magazines and to indoor magazines located in buildings that are not intrusion-resistant and theft-resistant:

1. Each magazine site shall be inspected by the licensee or his agent at least daily at approximately 24-hour intervals. If all magazines and outer perimeter security gates at the site are equipped with electronic intrusion detection devices conforming with paragraphs (3)(ii) or (iii), and (4)(ii) or (iii), or otherwise approved, in writing, by the Department, the inspection shall be conducted at least every 7 days. Individual magazines or entire magazine sites which do not contain explosives are not required to be inspected provided the inspection records reflect the date the last explosives were removed from the magazine. Each inspection shall include the magazine itself, the access points and perimeter security. The inspection can be performed by a person or electronically by remote cameras. A record of the inspections shall be kept and made available to the Department. Records shall be maintained for at least 3 years. The record of each inspection shall include:
   (i) The names of the persons who inspected the site.
   (ii) The date and time each inspection began and ended.
   (iii) Any information related to the integrity of the magazine site.
   (iv) Actions taken on problems discovered.
   (v) The dates on which no inspections were conducted because no explosives were contained in the magazine.
(2) There may be no more than one access point to each magazine site. The Department may approve, in writing, more than one access point to a magazine site if the Department determines that the security of the site will be maintained.

(3) Each magazine must have outer perimeter security that obstructs, to the greatest extent possible, unauthorized access to the magazine by wheeled vehicles. The outer perimeter security must surround the entire magazine site and be located at least 25 feet away from the exterior of any magazine within the site or at least 25 feet away from the inner perimeter security measures, whichever is applicable. The Department may approve, in writing, a lesser distance upon request when the Department determines a lesser distance is appropriate and will not compromise the security of the magazine site. The outer perimeter security requirements can be met by measures approved by the Department as provided for in subsection (g) or by one or a combination of the following:

   (i) A sufficient number of personnel assigned to physically inspect each magazine containing explosives or detonators at least once every hour. All persons acting in this capacity shall at all times be equipped with a communications device capable of providing direct verbal communications with either the police department having jurisdiction or another person who has the ability to contact the police department having jurisdiction.

   (ii) Closed Circuit Television (CCTV) continuously monitoring the entire outer perimeter, or any portion of the outer perimeter that is not protected by another measure.

      (A) The images shall be recorded and maintained at least until magazine integrity is confirmed during the next required site inspection.

      (B) The latest output images of all CCTV cameras shall be viewed at least once every hour by a person having direct verbal communications with the police department having jurisdiction.

   (iii) Electronic intrusion detection devices including, but not limited to: microwave sensors, seismic detectors, vehicle detectors, alarms or infrared motion detectors.

      (A) If microwave sensors, seismic sensors, vehicle detectors or similar devices are used, the zone of detection of the devices shall encompass the entire outer perimeter, or any portion of the outer perimeter that is not protected by another measure.

      (B) All systems shall have the capability of providing initial notification of an alert within 15 minutes of an event and an onsite presence in response to an alert within 1 hour.

      (C) All systems shall have a backup power supply, and provide an alert in the event of a power loss or a compromise of the system integrity.

   (iv) An earthen barrier, a minimum of 7 feet in height. Earthen barriers shall be constructed to obstruct, to the greatest extent possible, unauthorized
access by wheeled vehicles. If made of loose soils the earthen barrier shall be compacted and vegetated to the greatest extent possible.

(v) A barrier constructed of boulders. The boulders shall be of a size and weight sufficient to deter, to the greatest extent possible, defeat of the barrier by wheeled vehicles.

(vi) A highwall that is a minimum of 7 feet in height and whose face or slopes are sufficient to obstruct, to the greatest extent possible, unauthorized access to the magazine site by wheeled vehicles.

(vii) Barriers composed of natural terrain features which are impassable, to the greatest extent possible, to wheeled vehicles.

(viii) A fencing system constructed of members that are of sufficient size, strength and anchorage to deter, to the greatest extent possible, the fencing system from being bent over, broken through or uprooted by a wheeled vehicle.

(ix) Other equivalent barriers approved by the Department, in writing.

(4) In addition to the requirements contained in paragraph (3), a magazine or group of magazines within a site that contains high explosives or detonators shall be enclosed by inner perimeter security designed to obstruct, to the greatest extent possible, access by unauthorized persons. The additional inner perimeter security shall be located at least 6 feet away from the exterior of any magazine within the site and at least 25 feet inside and away from the outer perimeter security. The inner perimeter security requirement can be met by measures approved by the Department as provided for in subsection (g) or by one or a combination of the following:

(i) A sufficient number of personnel assigned to physically inspect each magazine containing high explosives or detonators at least once every hour. All persons acting in this capacity shall at all times be equipped with a communications device capable of providing direct verbal communications with either the police department having jurisdiction or another person who has the ability to contact the police department having jurisdiction.

(ii) CCTV continuously monitoring the magazine interior or the exterior of the doors of each magazine containing high explosives or detonators.

(A) The images shall be recorded and maintained at least until magazine integrity is confirmed during the next required site inspection.

(B) The latest output images of all CCTV cameras shall be viewed at least once every hour by a person having direct verbal communications with the police department having jurisdiction.

(iii) Electronic intrusion detection devices including, but not limited to: microwave sensors, seismic detectors, alarms or infrared motion detectors.

(A) If alarms, infrared motion detectors or other similar devices are used, they shall be installed on each magazine containing high explosives
or detonators. Alarms shall be installed on all magazine doors. Infrared motion detectors and other similar devices shall be installed on the interior of each magazine.

(B) If microwave sensors, seismic sensors or similar devices are used, the zone of detection of the devices shall encompass the entire inner perimeter, or any portion of the inner perimeter that is not protected by another measure.

(C) All systems shall have the capability of providing initial notification of an alert within 15 minutes of an event and an onsite presence in response to an alert within 1 hour.

(D) All systems shall have a backup power supply, and shall provide an alert in the event of a power loss or a compromise of the system integrity.

(iv) A highwall that is a minimum of 20 feet in height and whose face or slopes are sufficient to obstruct, to the greatest extent possible, access by unauthorized persons.

(v) A fence constructed of a minimum of 9 gauge chain link fencing with a maximum 2-inch mesh that is kept in a condition which maintains its original functionality. The fence shall:

(A) Be buried at least 1 foot at the base or be equipped with a minimum 1.66 inch outside diameter bottom rail.

(B) Have a minimum height of 8 feet above the ground.

(C) Have a top rail with a minimum 1.66 inch outside diameter.

(D) Have firmly anchored posts 10 feet or less on center. End, corner and pull posts shall have a minimum outside diameter of 2.875 inches if round or 2.5-inch square. Intermediate posts shall have a minimum outside diameter of 2.375 inches if round or 2.25-inch C-Section. Posts shall be set in concrete at a minimum depth of 33 inches. The post holes shall be a minimum of 12 inches in diameter and be completely filled with concrete.

(E) Have outriggers at the top with concertina razor wire attached.

(F) Have concertina razor wire attached on the inside at the bottom.

(G) Have as many gates as the licensee demonstrates are necessary to provide for the safe exit of employees in the event of an emergency.

(H) All inner perimeter security emergency exit gates shall meet the requirements specified in paragraph (6).

(I) Vegetation shall be kept trimmed or suppressed to a distance of 6 feet from each side of the fence.

(vi) The Department may approve, in writing, the use of other security fence systems or other barriers that provide at least equivalent security.

(5) In addition to outer perimeter security, all portable magazines being used as stationary magazines and magazines having an a volume of less than 3 cubic yards shall be immobilized by fastening the magazine securely to the
earth or a terrain feature in a manner sufficient to prevent displacement of the magazine by a wheeled vehicle.

(6) Any single layer of perimeter security measures that obstructs, to the greatest extent possible, unauthorized access to the magazine by wheeled vehicles and deters, to the greatest extent possible, access by unauthorized persons, and is located at least 25 feet away from the exterior of any magazine within the site may be employed to satisfy the requirements of both paragraphs (3) and (4).

(7) Inner perimeter security gates shall be constructed at all access points. Gates shall have firmly anchored posts and shall be kept in a condition which maintains their original functionality. Each gate shall be securely padlocked whenever the site is unoccupied.

(i) Gates shall be constructed of a minimum of 9 gauge chain link fencing with a maximum 2-inch mesh. Gate frame members shall be a minimum outside diameter of 1.9 inches if round or 2.0-inch if square.

(ii) Gates shall have firmly anchored gate posts with a minimum 6.625-inch outside diameter. Posts shall be set in concrete at a minimum depth of 42 inches. The postholes shall be a minimum of 16 inches in diameter and shall be completely filled with concrete.

(iii) Gates shall have outriggers at the top with concertina razor wire attached.

(iv) The construction of the gates shall be contiguous with the surrounding fence.

(v) All gates shall have 2 locks. The locks shall have separate hasps and staples.

(vi) Each lock shall have a hood of at least 1/4-inch thick steel. The hoods must prevent sawing or lever-cutting action on the locks, hasps, and staples.

(vii) Each lock shall have at least five tumblers and a case-hardened shackle of at least 3/8 inches in diameter.

(viii) When a lock and chain are used to secure a gate, the minimum specification of the chain shall be 3/8 inch Grade 70, Transport.

(ix) The Department may approve, in writing, the use of other security gate systems that provide at least equivalent security.

(8) Outer perimeter security gates shall be constructed at all access points. Gates shall be designed and constructed to deter, to the greatest extent possible, defeat of the gate by wheeled vehicles. Gates shall have firmly anchored posts and be kept in a condition which maintains their original functionality. Gate-posts shall be a minimum 6.625-inch outside diameter. Posts shall be set in concrete at a minimum depth of 42 inches. The postholes shall be a minimum of 16 inches in diameter and be completely filled with concrete. The Depart-
ment may approve, in writing, the use of gateposts having smaller diameters or
other shapes or alternate gatepost anchoring methods, or both, that provide at
least equivalent security.

(9) Outer perimeter security gates shall be padlocked whenever the site is
unoccupied. All gates shall have 2 locks which meet the specifications of para-
graph (7)(vi)–(viii).

(10) “No Trespassing” signs shall be placed around the outer perimeter of
the site. Warning signs shall be placed at all access points. Signs shall be well
maintained.

(i) “No Trespassing” signs shall be spaced so that, except for corners,
adjacent signs are visible.

(ii) Signs shall be placed so that a bullet passing directly through the
sign will not impact a magazine.

(iii) Warning signs at all access points shall provide notice of private
property and no trespassing, in addition to providing a notice substantially
conforming to the following: “Danger, never fight explosives fires, explo-
sives are stored on this site” to warn first responders and the public of the
hazards contained within.

(iv) Warning signs at all access points shall provide an emergency con-
tact phone number.

(v) Signs may not be obscured by vegetation or other obstructions.

(vi) Signs shall be constructed of a durable, weather-resistant material.
Letters and numbers shall be of a minimum height of 2 inches that can be
easily seen and read.

(11) Magazines shall be constructed to the standards contained in this para-
graph. Magazines shall be constructed according to the construction standards
found in 27 CFR Part 555, Subpart K (relating to storage) with the following
additions:

(i) Mobile type 5 magazines being used as stationary magazines for
more than 1 year must be located within the outer perimeter security, shall
be immobilized in accordance with 27 CFR 555.211 (relating to construction
of type 5 magazines) and be fastened securely to the earth or a terrain fea-
ture in a manner sufficient to prevent movement of the magazine by a motor
vehicle. Motor vehicles used to transport bulk blasting agents that are left
unattended at a magazine site must have two Department approved methods
of disabling the vehicles to render them effectively immobilized and the
vehicles must be kept within the outer perimeter security. Disabling methods
may include:

(A) Steering locking devices
(B) Pedal locking devices
(C) Fuel or electrical system disablers.
(D) Other equivalent disabling measures approved by the Department.
(ii) Systems of pumps or tanks, or both, used to store, mix or dispense bulk blasting agents at magazine sites shall be equipped with locks or shall otherwise be constructed to prevent the unauthorized removal of blasting agents from the system.

(12) A person who stores explosive materials shall notify both the local police having jurisdiction in the area where the explosives are being stored and the Pennsylvania State Police of the storage. This notification must be made in the manner of and in addition to the notification requirements in 27 CFR 555.201(f) (relating to general).

(13) A person who stores explosive materials shall immediately notify the Department, the Pennsylvania State Police and the local police jurisdiction, if any, when any of the following occur:

(i) Evidence is discovered of a break-in or theft at the magazine, or an attempted theft or break-in has occurred.

(ii) The security measures required by this section have been breached or disabled or partially breached or disabled. Short-term partial breaches of security of less than 48-hour duration need not be reported under this subsection if all of the following apply:

(A) The partial breach was due to equipment failure or accidental or natural causes.
(B) An account of the partial breach was recorded under paragraph (1).
(C) Immediate measures are being taken to repair or replace the partial breach.

(iii) Unauthorized persons exhibiting suspicious behavior are observed in the vicinity of the magazine.

(iv) Inventory records indicate that explosive material is missing and unaccounted for.

(14) The notifications to State and local agencies required in paragraphs (12) and (13) are in addition to any notification required by agencies of the United States.

(e) Licensees of magazines licensed prior to June 18, 2005, shall comply with this section according to the following schedule except as approved by the Department under subsections (f) and (g):

(1) Immediately upon June 18, 2005, the inspection and notification requirements shall be implemented.

(2) Within 180 days of approval of the plan required by subsections (f) or (g), implement either the outer or inner perimeter security measure requirements.

(3) Within 360 days of approval of the plan required by subsections (f) or (g), implement the remaining perimeter security measure requirements.

(4) The Department, at its sole discretion, may approve, in writing, a time extension to the requirements of either paragraph (2) or (3) if the licensee has
demonstrated a good faith effort to comply with the perimeter security measure requirements imposed under this chapter.

(f) By August 17, 2005, licensees of magazines licensed prior to June 18, 2005, shall submit to the Department on forms provided by the Department:

(1) The plan required by § 211.113(b)(6) (relating to application contents).
(2) A schedule for the implementation of the plan required by § 211.113(b)(6).
(3) If the security enhancements required by subsection (d) cannot be implemented in the time frames required by subsection (e), the plan must include a request for a time extension. The request for a time extension must include a schedule and a justification for the extension. The Department will act upon time extension requests within 30 days of the receipt of the request.

(g) After consultation with the Pennsylvania State Police and the Pennsylvania Office of Homeland Security, the Department may approve, in writing, alternatives to specific requirements of this section which are based upon advanced technology or other alternatives and which, either alone or in combination with other measures, provide at least equivalent security at magazines or magazine sites. The Department will act upon requests for approval of alternative security measures or, upon the written request of the licensee, for approval of plans submitted pursuant to subsection (f) within 30 days of the receipt of the request. The Department may extend this review period for up to an additional 30 days if additional time is necessary to properly review the request.

(h) Requests for Department approval of plans submitted under subsection (f) or alternate requirements, including alternative security measures and time extensions under this section, shall be on forms provided by the Department.

(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).

(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.
§ 211.115. Application contents.


Authority
The provisions of this § 211.115 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source

Cross References
This section cited in 25 Pa. Code § 211.113 (relating to application contents).

§ 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.

Authority
The provisions of this § 211.116 issued under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source
The provisions of this § 211.116 adopted June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711.

§ 211.117. Daily summary of magazine transactions.

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

Authority
The provisions of this § 211.117 issued under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and
§ 211.121. General requirements.

(a) Except as otherwise provided in this subchapter, a person may not engage in blasting activities 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 use of fireworks governed by the act of May 15, 1939 (P.L. 134, No. 65) (35 P.S. §§ 1271—1278) (Repealed).

(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 acts as a blasting activity permit issued under this chapter.

(d) An application for a permit to conduct blasting activities must 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 a person who either:
   (1) 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) Demonstrates an inability or lack of intention to comply with this chapter as indicated by past or continuing violations.

(f) The permittee, 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.

Authority
The provisions of this § 211.121 amended under section 5 of The Clean Streams Law (35 P.S. § 691.5); sections 4(a) and 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. §§ 1396.4(a) and 1396.4b); sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (45 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source

§ 211.122. [Reserved].

Authority
The provisions of this § 211.122 reserved under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (45 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source
The provisions of this § 211.122 reserved June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial pages (378243) to (378244) and (281305).

§ 211.123. [Reserved].

Authority
The provisions of this § 211.123 reserved under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (45 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).
§ 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 must include all of the following:

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

(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 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.

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

(6) The specific types of explosives to be used.

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

(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 except for demolition blasting operations where the cube root scaled distance must be used.

(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.

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

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

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

(14) Proof that the permittee has third-party general liability insurance in the amount of $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.

Source

The provisions of this § 211.123 reserved June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial page (281305).
(15) The anticipated duration of the blasting activity for which the permit is needed.
(16) The anticipated days of the week and times when blasting may occur.
(17) The distance in feet and direction in degrees to the building not owned by the permittee or its customer that will be closest to the blasting.
(18) Other information needed by the Department to determine compliance with applicable laws and regulations.
(19) The printed name, signature and license number of the blaster who prepared the application.
(20) Loading plans which describe ranges of bore hole diameters and their depths, burdens and spacings.
(21) Types of stemming material.
(b) Blasting activity permits are not transferable.
(c) The blasting activity permit must specify all of the following:
   (1) The blasting activity permittee.
   (2) Any independent subcontractors performing work under this permit.
   (3) Limits on particle velocity and airblast.
   (4) The types of explosives that may be used.
   (5) The duration of the permit.
   (6) Other conditions necessary to ensure that the proposed blasting activity complies with the applicable statutes and this chapter.
(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 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.

**Authority**

The provisions of this § 211.124 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

**Source**

The provisions of this § 211.124 amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial pages (281305) to (281306).
§ 211.125. Blasting activity permit-by-rule.

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

(1) The blasts are designed and performed for a scaled distance of 90 or greater.
(2) No more than 15 pounds (6.81 kilograms) of explosives are detonated per delay interval of less than 8 milliseconds.
(3) The total charge weight per blast does not exceed 150 pounds (68.18 kilograms).
(4) The person notifies the Department either verbally, in writing or by other means approved by the Department prior to the initial blast. If the person gives verbal notification, a written notice shall be received by the Department within 5 working days. The notification must indicate all of the following information for all blasts that will occur under this permit:
   (i) The identity of the person.
   (ii) The location where the blasting will occur.
   (iii) The purpose of the blasting.
   (iv) The distance to the nearest building not owned or leased by the person or its customer.
   (v) The days of the week and times when blasting may occur.
   (vi) The duration of blasting activities under this permit-by-rule.
   (vii) The minimum scaled distance.
   (viii) The maximum weight of explosives detonated per delay period of less than 8 milliseconds.
   (ix) The maximum total weight of explosives per blast.
   (x) A contact person and telephone number.
(5) Blast reports are completed in accordance with § 211.133 (relating to blast reports).
(6) The other monitoring and performance standards of this chapter are met.

(b) The Department may revoke a blasting activity permit-by-rule under one of the following:

(1) The permittee has demonstrated an unwillingness or inability to comply with the applicable regulations.
(2) The blasting activity possesses a sufficient risk of harm to the public or the environment to warrant an individual blasting activity permit.

Authority

The provisions of this § 211.125 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source
The provisions of this § 211.125 amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial pages (281306) to (281307).

Subchapter D. RECORDS OF DISPOSITION OF EXPLOSIVES

Sec.
211.131. [Reserved].
211.132. [Reserved].
211.133. Blast reports.

Source
The provisions of this Subchapter D adopted July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751, unless otherwise noted.

Cross References
This subchapter cited in 25 Pa. Code § 211.191 (relating to scope).

§ 211.131. [Reserved].

Authority
The provisions of this § 211.131 reserved under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source
The provisions of this § 211.131 reserved June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial page (281307).

§ 211.132. [Reserved].

Authority
The provisions of this § 211.132 reserved under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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. § 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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. § 751-22).
§ 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 must contain, at a minimum, all of the following:

1. 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.
4. The name of the blasting activity permittee and blasting contractor, if applicable.
5. The blasting activity permit or appropriate mining permit number.
6. The date and time of the blast.
7. The printed name, signature and license number of the blaster-in-charge.
8. The type of material blasted.
9. A sketch showing the number of blast holes, burden, spacing, pattern dimensions, delay timing sequence, description of the 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.
10. The diameter and depth of each blast hole.
11. The height or length of stemming and deck separation for each hole.
12. The amount of explosives loaded in each borehole.
13. The types of explosives used and arrangement in blast holes.
14. The total weight in pounds of explosives, product density for bulk blasting agents, weight of packaged blasting agents and primer cartridges used.
15. The maximum weight in pounds of explosives detonated per delay period of less than 8 milliseconds.
16. The type of circuit, if electric detonation was used.
(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.

(18) A general description, including the street address and latitude and longitude, of the nearest building not owned or leased by the blasting activity permittee or its customer.

(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.

(20) The weather conditions.

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

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

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

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

(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.

(27) The monitoring records required 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 under subsection (b), are provided. Monitoring records shall be made part of the blast report within 7 days, if requested by the Department.

(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 must 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.

Authority

The provisions of this § 211.133 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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. §§ 820 and 823).
Subchapter E. TRANSPORTATION OF EXPLOSIVES

Sec. 211.141. General requirements.

The blasting activity permittee shall:

(1) Immediately unload a vehicle carrying explosives upon reaching a magazine location. The unloaded vehicle shall be removed from the site. The only exception to this requirement is if the vehicle is a licensed magazine under Subchapter B (relating to storage and classification of explosives).

(2) Load or unload explosives from a vehicle only after the engine is turned off, unless power is needed for the loading or unloading operation. The permittee shall take all precautions necessary, such as blocking the wheels, to prevent the movement of the vehicle while it is being loaded or unloaded.

(3) Load explosives only into a vehicle that is marked in accordance with the Department of Transportation standards for placarding vehicles transporting explosives.

(4) Prohibit smoking within 100 feet of a vehicle used for transporting explosives. “NO SMOKING” signs shall be posted when a vehicle containing explosives is parked at a blast site or magazine.

(5) Load no more than 2,000 pounds (908 kilograms) of explosives into an open body vehicle for transporting. The ends and sides must be high enough to
prevent explosives from falling off, and the load must be covered with a fire-resistant tarpaulin, unless the explosives are transported in a magazine securely attached to the vehicle.

(6) Load explosives into a closed body vehicle if the load is more than 2,000 pounds (908 kilograms) of explosives.

(7) Only load explosives into a vehicle with a bed made of wood or other nonsparking material.

(8) Load explosives into a vehicle which is also transporting metal, metal tools, blasting machines or other articles or materials likely to damage the explosives, only if these items are separated from the explosives by substantial nonsparking bulkheads constructed to prevent damage to the explosives.

(9) Load detonators and other explosives into the same vehicle only if the detonators are in containers that conform to the current version of the Institute of Makers of Explosives’ Safety Library Publication # 22 available from the Institute of Makers of Explosives, 1120 Nineteenth Street, N. W., Suite 310, Washington, DC 20036-3605.

(10) Not load explosives into the same vehicle with materials such as matches, firearms, electric storage batteries, corrosive compounds, flammable substances, acids, oxidizing agents and ammonium nitrate not in the original containers.

(11) Only load explosives into vehicles equipped with a fire extinguisher having a National Board of Underwriters Laboratories rating of 10 B:C or more. The fire extinguisher must be easily accessible and ready for immediate use.

(12) Load explosives into a vehicle so that explosives containers are not exposed to sparks or hot gases from the exhaust tailpipe. Exhaust systems that discharge upwards are recommended to avoid possible exposure of sparks or hot gases to explosives.

(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.

Authority

The provisions of this § 211.141 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).
Subchapter F. BLASTING ACTIVITIES

Sec. 211.151. Prevention of damage or injury.
211.152. Control of gasses, including carbon monoxide and oxides of nitrogen.
211.153. General requirements for handling explosives.
211.154. Preparing the blast.
211.155. Preblast measures.
211.156. Detonating the blast.
211.157. Postblast measures.
211.158. Mudcapping.
211.159. Electric detonation.
211.160. Nonelectric detonation.
211.161. Detonating cords.
211.162. Safety fuse.

Source

The provisions of this Subchapter F adopted July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751, unless otherwise noted.

Cross References

This subchapter cited in 25 Pa. Code § 211.191 (relating to scope); and 25 Pa. Code § 211.194 (relating to general requirements for handling explosives on a seismic exploration operation).

§ 211.151. Prevention of damage or injury.

(a) 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 may not cause flyrock. If flyrock occurs, the blaster-in-charge shall notify the Department within 4 hours of learning of the flyrock.

(c) 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 allowable particle velocity as indicated by Figure 1 at any building or other structure designated by the Department. The scaled distance and allowable particle velocity does not apply at a building or other structure owned or leased by the permittee or its customer.
(d) Blasts shall be designed and conducted to control airblast so that it does not exceed 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.

(e) 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 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 (c) or the airblast limit in subsection (d).

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

(392439) No. 526 Sep. 18
(g) All blasting activities shall be conducted in a manner which prevents damage to utility lines.

Authority
The provisions of this § 211.151 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source
The provisions of this § 211.151 amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial pages (281311) to (281313).

Cross References
This section cited in 25 Pa. Code 25 Pa. Code § 211.102 (relating to scope); and § 211.173 (relating to monitoring records).

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

(a) A blast shall be conducted so that the gases generated by the blast, including carbon monoxide and oxides of nitrogen, do not affect the health or safety of individuals. 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. 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 gases generated by the blast affect the health or safety, or both, of individuals.

Authority
The provisions of this § 211.152 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source
The provisions of this § 211.152 amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial page (281313).
§ 211.153. General requirements for handling explosives.

(a) Only a nonferrous, nonsparking tool shall be used to open containers of explosives.

(b) Matches, lighters and smoking are prohibited within 100 feet (30.48 meters) of the blast site and areas where explosives are used or stored.

(c) If it becomes necessary to destroy damaged or deteriorated explosives, the permittee shall immediately contact the manufacturer for technical advice and assistance.

(d) Detonators may not be forced into cartridges of explosive or cast boosters. Detonators shall be completely inserted into a hole in an explosive cartridge made with an approved powder punch or into the detonator well of a cast booster.

(e) Explosives may not be left unattended. They are to be stored in a licensed magazine or kept under the permittee's supervision and control.

(f) A loaded blast shall always be under the continuous observation of the blaster-in-charge or a designee.

(g) Shooting or carrying ammunition or firearms on a blast site and in areas where explosives are used or stored is prohibited, except for material needed to initiate the blast.

(h) If blasting activities are conducted in the vicinity of electric lines such as transmission lines or electrified railways, a test shall be made for presence of stray electric currents. Electric blasting caps may not be used if stray electric currents in excess of 50 milliamperes are present.

(i) A package of explosives may not be thrown, slid along floors or over other packages of explosives, or handled roughly.

(j) If an electrical storm approaches an area where there is an activity involving explosives, the area shall be cleared by the permittee or licensee, who shall post guards at all approaches to prevent trespass of unauthorized persons.

(k) Explosives and equipment that are obviously damaged or deteriorated may not be used.

(l) Explosives may not be abandoned.

Cross References
This section cited in 25 Pa. Code § 211.194 (relating to general requirements for handling explosives on a seismic exploration operation).

§ 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. A blaster-in-charge is responsible for all effects of the blasts that the 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 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. 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:

1. Ferrous material may not be used in the blast hole unless the use is approved by the Department in writing. This includes the use of steel casings, ferrous tools and retrieving equipment.

2. Only nonferrous, nonsparking tamping sticks may be used in loading a blast hole. Sectional poles connected by brass fittings are permitted, if only the nonferrous, nonsparking end of the pole is used for tamping. Retrieving hooks must be made from nonsparking metal such as brass or bronze.

3. When using a pneumatic loading device, every precaution shall be taken to prevent an accumulation of static electricity. A loading operation shall be stopped immediately if static electricity or stray electrical currents are detected. The condition shall be remedied before loading may be resumed.

4. The blast hole shall be carefully checked for obstructions with a non-ferrous, nonsparking tamping pole, a tape, a light or a mirror before it is loaded. The use of magnifying mirrors is prohibited. Explosives may not be forced past an obstruction in a blast hole.

5. Each blast hole shall be logged throughout the 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 under § 211.133 (relating to blast reports).

6. A blast hole containing loose dynamite shall be stemmed but not tamped.

7. The Department may specify the type and amount of stemming.

(g) Before connecting one loaded blast hole to another, all activity within the blast area shall cease, and all nonessential persons shall retreat to a safe place. The blaster-in-charge shall determine the blast area.
(h) Primers shall be prepared only at the hole to be loaded, immediately prior to loading. The components of the primer are to be kept separated at the collar of the blast hole. The primer may not be slit, dropped, deformed or carelessly handled and may not be tamped or forced into the blast hole.

(i) Immediately upon completing the loading of a blast hole, any wood, paper or other materials used to pack explosives shall be inspected for the presence of explosives and removed to an isolated area. These materials may be burned after the blast has been fired. Persons may not be within 100 feet (30.48 meters) of these burning materials.

(j) Measures shall be taken to reduce the chance of flyrock including:

1. The use of blasting mats or other protective devices, if, in the opinion of the blaster-in-charge, the measures are necessary to prevent injuries to persons or damage to property.

2. When blasting to an open, vertical face, checking the face for loose, hanging material or other faults prior to loading the blast holes.

(k) Explosives may not be brought to a blast site in greater quantities than are expected to be needed for that blast. Surplus explosives may not be stored in the blast area.

(l) Before a blast hole is loaded, it shall be checked to ensure that it is cool and does not contain any hot metal or smoldering material remaining from drilling the hole.

(m) The use of abrasive or sharp-edged constituents in stemming material shall be avoided if tamping is necessary and the tamping may sever blasting cap leg wires, shock tubes or detonating cords.

(n) 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 loading of explosives or blasting agents), 30 CFR 56.6306(a) (relating to loading, blasting, and security) or 30 CFR 77.1303(g) (relating to explosives, handling and use), as applicable.

Authority

The provisions of this § 211.154 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source

The provisions of this § 211.154 amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial pages (281314) to (281315).

§ 211.155. Preblast measures.
Prior to detonating a blast, the blaster-in-charge shall:

(1) Ensure that all excess explosives have been removed from the blast area and are located in a safe area.
(2) Inspect the blast site to ensure that connections are proper and adequate.
(3) Ensure that the blast area is cleared and safeguarded.
(4) In addition to the warning signal, notify all persons who may be in danger.
(5) Ensure that the necessary precautions are in place to protect the public on public roads.
(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.
§ 211.156. Detonating the blast.
(a) A blast may be detonated only between sunrise and sunset unless the Department authorizes a blast at another time of day.
(b) Only the blaster-in-charge may detonate a blast.

§ 211.157. Postblast measures.
(a) After a blast has been detonated, no one may return to the blast area until all smoke and fumes have dissipated.
(b) After the smoke and fumes have cleared, the blaster-in-charge shall return to the blast site and closely inspect the blast site to ensure that it is safe with respect to the blasting activity.
(c) After the blaster-in-charge has determined the blast area is safe, the blaster-in-charge shall sound an all-clear signal, consisting of one long blast, lasting approximately 10 seconds. This all-clear signal shall be of sufficient power to be heard 1,000 feet (304.80 meters) from the blast site.
(d) The blaster-in-charge shall determine if a misfire occurred and shall take all actions necessary to render the blast site safe. The blast site shall be made safe before drilling or muck removal begins.
(e) If the blaster-in-charge suspects that undetonated ammonium nitrate/fuel mixture remains in the muck pile, the muck pile shall be thoroughly wetted down with water before any digging is attempted. Special attention shall be given to determine if primers, other explosives or detonators are present in the muck pile.
(f) The blaster-in-charge shall immediately complete the blast report as required by § 211.133 (relating to blast report).
(g) The blaster-in-charge shall notify the Department within 24 hours of the occurrence of a misfire. A copy of the blast report shall be forwarded to the Department.

Cross References
This section cited in 25 Pa. Code § 211.133 (relating to blast reports).

§ 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 1 pound (0.454 kilogram) of explosives shall be used for a blast.

Authority
The provisions of this § 211.158 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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
§ 211.159. Electric detonation.

(a) Electric blasting caps shall be tested for continuity with a blaster’s galvanometer or blaster’s multimeter specifically designed for testing blasting circuits. Testing shall be done:

1. Before the primers are made up.
2. After the blast hole has been loaded but prior to stemming.
3. As the final connecting of the circuit progresses.

(b) When a shunt is removed from electric blasting cap leg wires, the exposed wires shall be reshunted.

(c) Electric blasting caps may not be employed in a blast if there is any possibility of wires from the circuit being thrown against overhead or nearby electric lines.

(d) An effort may not be made to reclaim or reuse electric blasting caps if the leg wires have been broken off near the top of the cap.

(e) Leg wires on electric blasting caps shall extend above the top of the blast hole. Wire connections and splices are not allowed in the blast hole.

(f) Only solid wire shall be used in a blasting circuit. The use of stranded wire is prohibited.

(g) When electric detonation is used near public roads, signs shall be erected at least 500 feet (152.40 meters) from the blast areas reading: “BLAST AREA - SHUT OFF ALL TWO-WAY RADIOS.”

(h) A blasting machine is the only permissible source of electrical power for a detonation.

(i) The blasting circuit shall remain shunted until the time for detonation unless the circuit is being tested or connections are being made.

(j) A sticker shall be displayed on blasting machines that shows they have been tested within the last 30 days by procedures recommended by the manufacturer or supplier to ensure performance at rated capacity. If blasting caps are used in the test, they shall be covered with earth or sand.

(k) When electronic detonation is used, the blaster-in-charge shall determine that adequate current, as specified by the manufacturer of the detonators, is available to properly energize the detonators in the circuit.
§ 211.160. Nonelectric detonation.

Nonelectric initiation systems shall be checked and tested for secure connections in accordance with recommendations of the manufacturer of the system in use.

§ 211.161. Detonating cords.

(a) Detonating cord shall be cut from the supply roll immediately after placement in the blast hole. A sufficient length of downlines shall be left at the top of the blast hole for connections to trunk lines. The supply roll shall be immediately removed from the site. Scrap pieces of detonating cord shall be destroyed after connections are made.

(b) A trunk line shall be covered with at least 12 inches (0.30 meter) of earth or sand, unless otherwise authorized by the Department.

(c) Detonating cord may not be spliced if the resulting splice will fall within a blast hole.

§ 211.162. Safety fuse.

(a) When safety fuse is used in blasting, it shall be long enough to provide a burn time of 120 seconds or longer.

(b) Prior to using safety fuse, the blaster-in-charge shall conduct a test burn. The test burn will utilize at least a 12-inch (0.30-meter) section of fuse which is lit, then timed to determine actual burn time.

(c) A blasting cap shall only be crimped to a safety fuse with a proper crimping tool. A blasting cap may not be attached to a safety fuse in or within 10 feet (3.05 meters) of a magazine.

Subchapter G. REQUIREMENTS FOR MONITORING

Sec.
211.171. General provisions for monitoring.
211.172. Monitoring instruments.
211.173. Monitoring records.

Source
The provisions of this Subchapter G adopted July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751, unless otherwise noted.

Cross References
This subchapter cited in 25 Pa.Code § 211.124 (relating to blasting activity permits); and 25 Pa.Code § 211.191 (relating to scope).
§ 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) If monitoring is required, a ground vibration and airblast record of each blast shall be made part of the blast report.

(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 0.25 inch per second unless otherwise directed by the Department.

(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 must be attached to the blast report. This printout must 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 Engineers’ Standards Committee.

Authority

The provisions of this § 211.171 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source

The provisions of this § 211.171 amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial pages (281318) to (281319).

§ 211.172. Monitoring instruments.

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

(b) The monitoring instrument must be constructed to meet the guideline established by the International Society of Explosives Engineers’ Standards Committee.
(c) A monitoring instrument shall be calibrated annually and when an instrument is repaired and the repair may affect the response of the instrument. Calibration shall be done by the manufacturer of the equipment, 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 must 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. Calibration procedures and documentation of calibration shall be made available for review by the Department.

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

Authority
The provisions of this § 211.172 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source
The provisions of this § 211.172 amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial pages (281319) to (281320).

§ 211.173. Monitoring records.

(a) Anyone using a monitoring instrument shall be trained on the proper use of that instrument by a representative of the manufacturer or distributor, or other competent individual. A record of that training is to be maintained and available for review by the Department.

(b) Monitoring records, at a minimum, shall contain:

1. A calibration pulse on each of the mutually perpendicular ground vibration traces. These pulses shall represent the dynamic response of the entire recording system to an internally-generated calibration signal, and shall allow the Department to verify that the seismograph is recording ground vibration to its specific accuracy.

2. The time history of particle velocities for three mutually perpendicular ground vibration traces and one air-overpressure trace, including time base, amplitude scales and peak values for all traces.
(3) The results of a field calibration test for each channel.
(4) The frequency content of all vibration signals using either single degree of freedom (SDF) response spectrum or half-cycle zero-crossing analysis methods.
(5) Frequency versus particle velocity plots as indicated in § 211.151(c), Figure 1 (relating to prevention of damage).
(6) The name and signature of the individual taking the recording.
(7) The location of the monitoring instrument, date and time of the recording.
(8) The last calibration date of the monitoring instrument.
(c) If the Department questions the validity of a ground vibration or airblast record, or the interpretation of the record, the Department may require a ground vibration or airblast recording to be analyzed or certified by an independent, qualified consultant who is not related to the blasting activity permittee or its customer. When the Department requires that a recording be analyzed or certified, it shall be performed and included with the blast report within 30 days.

Cross References
This section cited in 25 Pa. Code § 211.133 (relating to blast reports).

Subchapter H. BLASTING ACTIVITIES NEAR UNDERGROUND UTILITY LINES

Sec.
211.181. Scope.
211.182. General provisions.

Source
The provisions of this Subchapter H adopted July 13, 2001, effective July 14, 2001, 31 Pa.B. 3751, unless otherwise noted.

Cross References
This subchapter cited in 25 Pa. Code § 211.191 (relating to scope).

§ 211.181. Scope.
This subchapter applies to buried or underground utility lines and utility lines making contact with the surface of the ground.

§ 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.
(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.

(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 1/2 the horizontal distance from the closest portion of the utility line.

(d) If one or more of the requirements in this section are not feasible or create 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.

Authority

The provisions of this § 211.182 amended under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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); section 2(f) of the act of May 18, 1937 (P.L. 654, No. 174) (43 P.S. § 25-2(f)); and Reorganization Plan No. 2 of 1975 (71 P.S. § 751-22).

Source

The provisions of this § 211.182 amended June 22, 2018, effective June 23, 2018, 48 Pa.B. 3711. Immediately preceding text appears at serial page (281321).

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.

Authority

The provisions of this Subchapter I issued under sections 1917-A and 1920-A of The Administrative Code of 1929 (71 P.S. §§ 510-17 and 510-20); section 4.2 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4b); section 11(e) of the Noncoal Surface Mining Conservation and Reclamation Act (52 P.S. § 3311(e)); 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. § 751-22)

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§ 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 in Subchapter C (relating to permits), an application for a blasting activity permit for seismic exploration must include all of 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, all of 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), all of 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 all of 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 MSHA-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.

APPENDIX A. [Reserved]

Source