Module 16: Large Noncoal Blast Plan

(Chapter 211/§§ 77.561/77.562/77.563/77.564)

☐ **New**
☐ **Revised**

Permittee Bishop Brothers Construction_
Permit No. _____
Mine Name Minard quarry_____
County Bradford_____
Township Athens_____

Blasting Contractor _____

Blasting Contractor ATF Permit License No. _____

An application for proposed blasting shall contain a blasting plan for the proposed permit area, explaining how the applicant intends to comply with §§ 77.561-77.565 (relating to use of explosives) and including the following; drilling patterns, including size, number, depths and spacing of holes, charge and packing of holes, types of initiation and detonation controls, sequence and timing of firing holes, and scaled distance. Persons responsible for blasting operations at a blasting site shall be familiar with the blasting plan and site-specific performance standards (25 Pa. Code Chapter § 77.453).

A permit issued under the Noncoal Surface Mining and Conservation and Reclamation Act (52 P. S. §§ 3301-3326), and the regulations promulgated thereunder (25 Pa. Code Chapter 77), authorizing blasting activity shall act as a blasting activity permit issued under 25 Pa. Code Chapter 211. An application for a blasting activity permit shall be prepared by a blaster and shall include information needed by the Department to determine compliance with applicable laws and regulations and conditions necessary to ensure that the proposed blasting activity complies with the applicable statutes and 25 Pa. Code Chapter 211. (25 Pa. Code Chapter § 211.121, 25 Pa. Code Chapter § 211.124).

Sections 16.1 through 16.12 and Sections 16.14 through 16.17 must be submitted with the permit application. Section 16.13 (relating to public notice of blasting schedule) must be submitted prior to blast plan approval. There shall be no blasting until a blast plan has been approved by the Department.

There is a fee required under 25 PA Code Chapter § 77.106 for each blast plan application. Please refer to: https://www.dep.pa.gov/Business/Land/Mining/BureauofDistrictMining/Pages/Fees.aspx for the most current fee rates.

Is the fee being submitted with the application?

☐ Yes ☐ No

***16.1a Blast Loading Plan 1* (§ 77.453)**

	Hole DIA.	MAX # HOLES	MAX # ROWS	BURDEN		SPACING		HOLE DEPTH		STEMMING	
				MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	TYPE
A	1.5-2	400	20	2	8	.5	8	2	20	2	water
B	1.5-2.5	300	20	2	8	2	8	2	20	2	cuttings/stone
C	2.5-3.5	300	20	3	12	3	12	4	50	3	cuttings/stone
D	3.5-4.5	300	20	5	14	5	14	5	50	4.5	cuttings/stone
E											

Maximum explosives weight per delay (less than 8ms) 261_____ Minimum Scaled Distance 70_____

Specific Type of Explosives det cord, dynomite, anfo, case product, emulsion products_____

Method of blast initiation Electric ☒ Non-Electric ☐ Other ☐

Explain Other _____

Comments:

A	1.5-2 inch holes for det cord holes will be stemmed with water for dimensional stone blasting also all cord will be covered with sand to meet dep standards All blast shots will be desinged to maintain a air blast no greater then 133 dbl and a scaled distance no less 70 monitored by a seismograph located at the nearest dewlling in proportion to the blast
B	2 ft min stemming in holes 1.5-2 in. 3 ft min stemming in holes 2-2.5 in. diameter holes All blast shots will be desinged to maintain a air blast no greater then 133 dbl and a scaled distance no less 70 monitored by a seismograph located at the nearest dewlling in proportion to the blast
C	3 ft min stemming in holes 2.5-3 in diameter up to 10 ft deep. With hole depths greater and diameters from 3 - 3.5in. 4ft min stemming and 4ft would be the min spaceing and burden All blast shots will be desinged to maintain a air blast no greater then 133 dbl and a scaled distance no less 70 monitored by a seismograph located at the nearest dewlling in proportion to the blast
D	4.5 ft min stemming on holes 3.5 in. 5 ft min stemming on holes larger then 3.5 in All blast shots will be desinged to maintain a air blast no greater then 133 dbl and a scaled distance no less 70 monitored by a seismograph located at the nearest dewlling in proportion to the blast
E	

16.1b Blast Loading Plan 2 (§ 77.453)

	Hole DIA.	MAX # HOLES	MAX # ROWS	BURDEN		SPACING		HOLE DEPTH		STEMMING	
				MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	TYPE
A											
B											
C											
D											
E											

Maximum explosives weight per delay (less than 8ms) _____ Minimum Scaled Distance _____

Specific Type of Explosives _____

Method of blast initiation Electric ☐ Non-Electric ☐ Other ☐

Explain Other _____

Comments:

A	
B	
C	
D	
E	

***16.2 Peak Particle Velocity and Airblast Limits* (§§ 211.151 (c),(d))**

Blasts shall be designed and conducted to meet the maximum allowable peak particle velocity indicated by Figure 1 of 25 PA Code Chapter 211.151 (c) and not exceed the noise levels specified in Table 1 of 25 PA Code Chapter 211.151 (d) at the closest building not owned or leased by the permittee or its customer.

The Department may establish an alternative peak particle velocity or airblast level if it determines that an alternative standard is appropriate or if the owner and lessee, if leased to another party, of a structure located on the permit area have each signed a waiver releasing the vibration limit. The waiver shall be clear, knowing and specific. (attachment(s)**NOTE:** *Additional review time will be necessary if the applicant submits a waiver for an alternative peak particle or airblast limit at a structure.*

***16.3 Will the sequence and timing of hole detonation be determined by considering factors such as geology, direction and proximity of homes or other structures, permit boundaries, or the locations of underground or overhead utilities.* (§ 77.453)** ☒ Yes ☐ No

***16.4 Will the loading of holes be determined by considering factors such as geology, direction and proximity of homes or other structures, permit boundaries, or the locations of underground or overhead utilities.* (§ 77.453)** ☒ Yes ☐ No

***16.5 Blasting near Dwellings, Public Buildings or Schools* (§ 77.564(g)(3))**

Will blasting occur within 1,000 feet of any dwelling, public building or school? ☐ Yes ☒ No

indicate distance to the nearest dwelling or structure, neither owned nor leased by Permittee, from the area where blasting will occur. 1150 feet

16.6 If blasting will occur within 1,000 feet of any public building or school, explain how notification required by 25 Pa Code § 77.564(g)(3) will be made.

16.7 Will blasting be conducted within 300 feet of an occupied dwelling? (§ 77.564(g)(4)) ☐ Yes ☒ No

16.7a If blasting is proposed within 300 feet of an occupied dwelling provide a notarized written waiver from the owner each dwelling specifying the distance blasting may occur to the dwelling (**Note:** If the waiver includes an increase in the peak particle velocity limits or in the airblast limits, in 25 Pa Code Section 211.151(c) and (d), the alternative limits must be specified in the waiver). (Attachment) (§ 77.564(g)(4))

16.8 Will blasting will be conducted within 800 feet of any public road? (§ 77.564(g)(1)) ☐ Yes ☒ No

16.8a If blasting will be conducted within 800 feet of any public road describe the precautions that will be taken to protect the travelling public (can be submitted as an attachment): (§ 77.564(g)(1))

16.9 Blast Area (§§ 77.564(d)(1), 77.564(e))

Describe how the blast area as defined in 25 Pa Code Section 211.101 will be determined, the procedures for notification of all persons who may have access to the blast area, and how the blast area will be secured and safeguarded (can be submitted as an attachment):

The blaster in charge will determing the size of the blast area. The quarry foreman will notify all the miners. All acess point to the quarry will be blocked and all miners will be counted and moved to a designated area determined by the blaster in charge for the duration of the blast The blaster will give 3 audible warnings prior to detonateing the blast and one audible all clear horn after the blaster has determined the blast area to be safe after the all clear horn the blaster in charge will notify the foreman that the quarry is safe to enter and resume work

16.10 Underground Mines (§ 77.551)

Will blasting occur within 500 feet to any point over or adjacent to an active or abandoned portion of an active underground mine? ☐ Yes ☒ No

If yes attach completed MSHA form. ***(Attachment)***

16.11 Underground Utility Lines (§ 211.181-182)

Will blasting be conducted within 200 of feet Underground Utility Lines? ☐ Yes ☒ No

If underground utililities are located within 200 feet of the area where blasting will occur, attach a copy of the notification sent to the owner(s) (submit as an attachment).

If there are any requests for waiver of any of the provisions of 211.182 attach copies of any agreements with the owner(s) of the utilities (submit as an attachment).

16.12 Streams (§ 73 P.S. s 166(d)

If blasting will occur within 100 feet of any streams, identify the stream and indicate the distance blasting will occur from the stream.

Stream: _____ Distance: _____

16.13 Public Notice of Blasting Schedule (§ 77.563)

Submit the following to the Department prior to the initiation of blasting.

a) A Copy of the public notice of the blasting schedule that is published in a newspaper of general circulation in the locality of the area where blasting will occur (submit as an attachment)

b) A List of the Local governments and public utilities that are located within 1,000 feet of the area where blasting will occur, who received copies of the blasting schedule. (**Note:** These shall be sent a copy of the blasting schedule.) (submit as an attachment)

16.14 Explosive Storage (§ 87.65(a)(11)

Will explosives be stored within the proposed blasting area? ☐ Yes ☒ No

If "yes" provide current explosives storage security plan number. _____

If no explain the disposition of explosives materials used for this project.

_____

_____

_____

16.15 Blast Plan Preparer (§ 211.124(a))

The PA licensed blaster who prepared this application must print and sign name below. (General or Surface Mining Authorization Only)

Licensed Blaster _____
Print

Licensed Blaster _____ Date _____ Blaster's license Number **BL-**_____
Sign (General or Surface Mining Authorization)

16.16 Permittee Authorization Representative (§ 77.107)

The permittee or an authorized representative of the permittee must print and sign name below.

Permittee or Authorized Representative _____
Print

Permittee or Authorized Representative _____ Date _____
Sign

16.17. Map (attachment-delineates where blasting will occur and the area within 1,000 feet of where blasting will occur.) (If explosives are going to be stored on the mine site, the location of the explosives storage must be included on the map.) **The map should accurately show, at a minimum, permit boundaries, the locations of streams, gas wells and lines, other undrground utilities, overhead utilities and the nearest dewllings and other structures. (§§ 211.124(7)), (77.454(a)(9)**

16.18 List of attachments (Check all that apply)

- ☐ Dwelling Waiver
- ☐ Road Precaution Description
- ☐ Blast Area Security Plan
- ☐ MSHA Form
- ☐ Utility Notification
- ☐ Blast Schedule Public Notice
- ☐ Map
- ☐ Other _____
- ☐ Other _____

Department Use Only:

DEP Blasting Inspector _____
Print

DEP Blasting Inspector _____ Date _____
Sign

Recommendation - ☐ Approval ☐ Disapproval

Comments: