

MODULE 16

Module 16: Large Noncoal Blast Plan

[Chapter 211/§ 77.561/77.562/77.563/77.564]

- New
- Revised

Permittee Specialty Granules LLC
 Permit No. 01170301
 Mine Name Northern Tract Quarry
 County Adams
 Township Hamiltonban

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 16.11 and Sections 16.13 through 16.17 must be submitted with the permit application. Section 16.12 (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. The fee is \$475. 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"-2.5"	200	35	3'	6'	3'	6'	3'	6'	2'	Crushed stone
B	3.0"-4.5"	200	10	5'	10'	5'	10'	9'	53'	5'	Crushed stone
C	5.0"- 6.5"	200	10	8'	15'	8'	15'	10'	53'	5'	Crushed stone

Maximum explosives weight per delay (less than 8ms) 2,000 Minimum Scaled Distance 30

Method of blast initiation Electric Non-Electric Other
 Explain Other Digital Electronic Detenators

Comments:

A	Hole diameter (minimum): 1.5 inches. Hole diameter (maximum): 2.5 inches.
B	Hole diameter (minimum): 3.0 inches. Hole diameter (maximum): 4.5 inches.
C	Hole diameter (minimum): 5.0 inches. Hole diameter (maximum): 6.5 inches

	Hole DIA.	MAX # HOLES	MAX # ROWS	BURDEN		SPACING		HOLE DEPTH		STEMMING	
				MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	TYPE
A	1.5"-2.5"	150	10	3'	6'	3'	6'	3'	6'	2'	Crushed stone
B	3.0"-4.5"	150	10	5'	10'	5'	10'	9'	53'	5'	Crushed stone
C	5.0"-6.5"	150	10	8'	15'	8'	15'	10'	53'	5'	Crushed stone

16.1b Blast Loading Plan 2 (77.453)

Maximum explosives weight per delay (less than 8ms) 800 Minimum Scaled Distance 30
 Method of blast initiation Electric Non-Electric Other
 Explain Other Digital Electronic Detonators.

Comments:

A	<p><u>Blasting within 1,000 ft. of an occupied dwelling.</u> Hole diameter (minimum): 1.5 inches. Hole diameter (maximum): 2.5 inches. Blasts will be designed to maintain compliance with peak particle velocity/noise level limits and control fly-rock. The blast design will be such to release the blast away from the direction of the dwelling when possible and additional measures to control fly-rock will be implemented as necessary.</p>
B	<p><u>Blasting within 1,000 ft. of an occupied dwelling.</u> Hole diameter (minimum): 3.0 inches. Hole diameter (maximum): 4.5 inches. Blasts will be designed to maintain compliance with peak particle velocity/noise level limits and control fly-rock. The blast design will be such to release the blast away from the direction of the dwelling when possible and additional measures to control fly-rock will be implemented as necessary.</p>
C	<p><u>Blasting within 1,000 ft. of an occupied dwelling.</u> Hole diameter (minimum): 5.0 inches. Hole diameter (maximum): 6.5 inches. Blasts will be designed to maintain compliance with peak particle velocity/noise level limits and control fly-rock. The blast design will be such to release the blast away from the direction of the dwelling when possible and additional measures to control fly-rock will be implemented as necessary.</p>
	<p><u>Blasting within 800 ft. of a Public Road.</u> Blasts will be designed to maintain compliance with peak particle velocity/noise level limits and control fly-rock. The blast design will be such to release the blast away from the direction of the public road when possible and additional measures to control fly-rock will be implemented as necessary.</p>

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. 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. 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. 890 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 Section 77.564(g)(3) will be made.

Not Applicable - Blasting will not occur within 1,000' of a public building or school.

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))**

All blasts will be designed to maintain compliance within peak particle velocity/noise level limits and control fly-rock. Additionally, a 100-foot to 300-foot wide maintained buffer, consisting of forestland, will be preserved around the project perimeter per the Conditional Land Use permit issued through Hamiltonban Township. This forested area will provide buffer to the public. .

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 blast area will be the active quarry perimeter limits. Prior to blasting, an audible warning will sound (five minute constant whistle). After the blast and the post-blast inspection, an "all clear" signal (two short whistles) will be given.
On the day of the blast, all access routes to the blast area will be blocked/controlled with gates/signage until the blast and the post-blast inspection are completed and the "all clear" signal is given. Prior to the blast, the blast area and quarry area are inspected with all personnel and equipment accounted for and moved to a safe distance.

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*

**A small exploration adit from a former copper mine operation exists near the middle of the permit area as shown on Exhibit 6.2 and 9. This feature is relatively small and shallow, and will be removed during the initial development of the quarry.*

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*

**As noted in Exhibit 12 of the permit drawings, shallow surface blasting may be required within 200 feet of an existing gas line along the northern site perimeter to facilitate rock excavation for pond, road, and ditch development. If required, this blasting will be approved through Columbia Gas and PADEP, as applicable and prior to commencing.*

If underground utilities 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 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)

Please refer to Attachment 16.12 provided with this module.

- 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)

Not Applicable

16.13 Explosive Purchase (211.123)


Will a blasting contractor conduct blasting at this site? Yes No

If no provide the permittee's Explosives Purchase Permit number: PP# _____

16.14 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 Mike Cave
Print

Licensed Blaster  Date 12/18/17 Blaster's license Number BL-2760
Sign (General or Surface Mining Authorization)

16.15 Permittee Authorization Representative (77.107)

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

Permittee or Authorized Representative Justin P. Dunlap
Print

Permittee or Authorized Representative  Date 12/18/17
Sign

16.16 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 underground utilities, overhead utilities and the nearest dwellings and other structures. (211.124(7)), (77.454(a)(9))

Please refer to Exhibit 9 provided with this permit submission which depicts the requested information. Blasting is proposed within the limits of the quarry area. Explosives will not be stored on site.

16.17 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 (Refer to Exhibit 9)
- Other _____
- Other _____

Department Use Only:

DEP Blasting Inspector _____
Print

DEP Blasting Inspector _____ Date _____
Sign

Recommendation - Approval Disapproval

Comments:

MODULE 16 CHECKLIST



LARGE NONCOAL BLAST PLAN MODULE 16 CHECKLIST

COMPANY: Specialty Granules LLC PERMIT NO: 01170301

ADDRESS: 1455 Old Waynesboro Road, Blue Ridge Summit, Pennsylvania 17214

TOWNSHIP: Hamiltonban COUNTY: Adams

YES NO NA

- Are there four copies of the Module 16 blast plan application?**
- Was the \$475.00 fee, a requirement of 25 PA Code Chapter 77.106, submitted with the application?**
- 16.1. Is blasting to be done within 500 feet of an active or abandoned portion of an active deep mine? [77.551, 77.564(h)]
- If blasting is to be done within 500 feet of an active or abandoned portion of an active deep mine are MSHA forms and a map provided?
- 16.2. Will blasting be conducted within 100 feet of any streams? [73PS§166(d)]
- If blasting be conducted within 100 feet of any streams, have the stream and the distance been indicated?
- 16.3. Will blasting occur within 200 feet of utilities, pipelines, or storage facilities? [211.181, 77.564(g)(2)]
- If blasting will occur within 200 feet of utilities, pipelines, or storage facilities is a copy of the notice or letter sent to each of the utilities, pipeline or storage facilities included? A PA One-call receipt may be accepted as a copy of a notice for utility owners who are PA One-call members.
- If a waiver of a provision or provisions of 211.182 is requested is a letter from the utility owning the lines must be included for DEP review?
- If blasting within the right-of-way of the utility is proposed has documentation of approval from the utility been submitted?
- 16.4,4a. Has information been submitted for all of the applicable blast loading plans? [211.124(a)(15), 211.124(b)(6), 77.453]
- Are all items in the applicable blast loading plans completed including the type of blasting that each blast loading plan is applicable to?
- 16.5. Is an alternative peak particle velocity or airblast level being requested? [211.151(c), (d) and (e)] Department approval is necessary and may be granted at the Department's discretion for any peak particle velocity or airblast limit that is alternative to the limits in 211.151(c) and (d). Alternative peak particle velocity or airblast levels which are high enough for there to be potential damage to a structure can be approved only if there is a knowing and specific waiver provided by the property owner.

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Module 16 Checklist

- 16.6 Has it been indicated if blasting will be conducted within 1,000 feet of any dwelling, public building or school? [211.124(a)(15), 211.124(b)(6), 77.564(h)]
- Has the distance to the nearest dwelling or other structure from the blasting been indicated?
- 16.6a. If blasting will be conducted within 1,000 feet of any dwelling, public building or school, has an explanation of the required notification been provided? [77.564(g)(3)]
- If blasting is planned within 300 feet of an occupied dwelling has a written consent of the property owner been provided? [77.564(g)(4)]
- 16.6b. Will there be blasting within 800 feet of a public highway? [77.564(g)(1)]
- If blasting will be conducted within 800 feet of a public road and the method of protecting the traveling public is blocking the road, has documentation of coordination with appropriate State or local authorities been provided?
- If blasting will be conducted within 800 feet of a public road and methods to protect the traveling public which are alternative to blocking the road are proposed, has a detailed proposal been submitted?
- 16.7. If blasting is planned within 1,000 of a dwelling or other occupied Building, has the "Blast loading Plan When blasting within 1,000 of a dwelling or other occupied building" been completed? [211.124(a)(15), 211.124(b)(6), 77.563(g)(3)]
- 16.7a. If blasting is planned within 1,000 of a dwelling or other occupied building, has a description of additional precautions that will be taken to protect the home or building and its occupants been provided? [211.124(a)(15), 211.124(b)(6), 77.564(h)]
- 16.7b. Has a description of the notification procedures for all persons who may have access to the blast area been provided? [77.561(d)(1)]
- 16.8. Has a description of how the blast area will be secured and safeguarded been provided? [211.124(a)(15), 211.124(b)(6), 77.564(h)]
- 16.9a. Has the proof of publication of the blasting schedule been included? [77.563]
- 16.9b. Has a list of the names of residents and/or owners of dwellings or other structures, local governments and public utilities located within 1,000 feet of the area where blasting will occur been included? [77.563(a)(1)]
- 16.10 Will explosives be stored on the SMP? [(211.124(a)(9)]
- If explosives will be stored on the SMP, was the current explosives storage security plan number provided?
- 16.11 If the permittee does not intend to use a blasting contractor is the purchase permit number provided? [211.121(a)]
- 16.12. Does the blaster have a general license or a surface mining license and is the blaster's name printed or typed and signed? [211.124(a)(16)]
- 16.13. Has the permittee or an authorized representative of the permit signed the application and is permittee's or authorized representative's name printed or typed and signed? [211.124(a)(15), 211.124(b)(6)]
- 16.14. Is there a map showing where blasting will be conducted provided with each of the four copies of the blast plan application? [211.124(7)]

LIST OF STRUCTURES WITHIN 1,000' OF BLASTING AREA

MODULE 16
PARCELS WITHIN 1,000 FEET OF BLASTING AREA

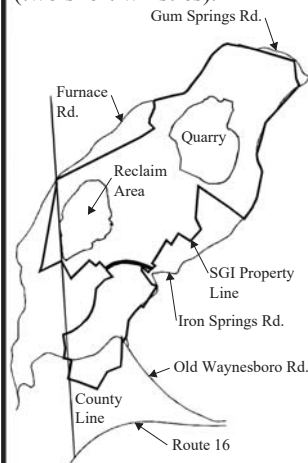
DISTRICT	TAX MAP	PARCEL	NAME	MAILING ADDRESS	CITY	STATE	ZIP
18	A-16	016	Holbrook, Stephen W.	1698 Iron Springs Rd.	Fairfield	PA	17320
18	A-16	019	Deardorff, William & Cynthia	220 Petes Ln.	Fairfield	PA	17320
18	B-16	095-A	Craig, John D. & Lisa A.	1748 Iron Springs Rd.	Fairfield	PA	17320

EXAMPLE BLASTING NOTICE

**Specialty Granules LLC
Announces It's Blasting Schedule
for 2018**

*The following criteria meet all
Federal, State and local regula-
tions. Please contact us if you
have any questions or concerns.*

- Blasting will be conducted weekdays between 9am-noon or 1pm-4pm.
- Blasting schedules may change due to weather conditions such as rain, snow, fog or low visibility.
- Blasting schedules may also vary due to unexpected production delays or increases.
- Blasting will be performed within appropriately permitted/bonded areas (Quarry).
- All access roads to the blasting area will be blocked prior to setup for blasting and until the area is safe to enter.
- Prior to blasting, an audible warning will sound (a five minute constant whistle). Following the blast, an all clear warning will be initiated (two short whistles).



SGI
Specialty Granules LLC

1455 Old Waynesboro Road
Blue Ridge Summit, PA 17214

(717) 794-2184

Permit # 01930302