

Module 17: Air Pollution and Noise Control Plan

17.1 Processing Facilities

a) Indicate whether or not there will be any processing facilities in the permit area. (Key to Exhibit 9)

<i>Type of Processing Facility</i>	YES	NO	If Yes:	DRY	WET
Crushing	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Screening	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cleaning	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Stockpiling	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>

b) Describe the processing facilities and the amount of minerals to be processed.

1) Processing Facilities

The processing facilities will consist of an impact crusher jaw crusher, cone crusher, vibratory screen, and radial stacker. The operator is proposing to process 325,000 TPY of limestone.

2) Minerals to be processed 1,300 tons/day

3) If the amount of minerals to be processed is less than 200 tons/day, describe the management practice to be utilized to control fugitive dust. (**Note:** If the amount of minerals to be processed is equal to or greater than 200 tons/day, contact the appropriate DEP Regional Office Air Quality Program).

Permit GP3-63-00970F was secured through the air quality program issued on 5/27/2022 for the Maggie Lynn mining site. Site equipment is electric and includes two crushers a vibratory and non-vibratory screen and two conveyors. Permit authorization included on pages 17-4 to 17-12.

17.2 Fugitive Dust Control

Describe the fugitive dust control practices that will be utilized at the surface coal mining operation to include practices that will be utilized for the following activities:

a) Access roads, haul roads and adjoining portions of the public road.

Use of water on access and haul roads, and prompt removal of earth or other materials from the public road. The end of the haul road has been upgraded twice. Seventy feet of concrete was installed on the haul road in 2017. An additional 400' of pavement was installed behind the concrete in 2022. A broom attachment for the skid steer is used regularly on this portion of road. The road will be watered at least daily during dry weather. Water needed for the dampening of the haul road, dampening stockpile or to be used with the sprays is planned to come from the pit. Based on the use of flocculant the water being produced at the pit is more than 1,000 gallons per day. The narrative of Module 8.6c suggests that the site may produce in excess of 7,200 gpd. The operator has available a tap located on property #5 that accesses public water. This source will be utilized if pit water is insufficient to meet the demands of the mine site.

b) Truck traffic (including fugitive particulate material from truck loads).

Travel speed of trucks and equipment will be restricted. A speed limit of 15 mph is expected when on haul roads of the permit area, and 5mph will be honored when crossing the Equitable Gas D-480 gas line, per an agreement. This limit will be noted with site signage. All trucks will be tarped leaving the site. Signage and tarping of trucks will be enforced by the permittee. As part of their on-site standard procedures, Neiswonger will direct all truck operators to do a walk around inspection of their vehicles, to ensure tailgates and tarpaulins are secure, before leaving the site.

- c) Drilling operation.

Drills will be equipped with hoods and dust collection devices. If these are not adequately eliminating fugitive dust then only drills equipped with water sprays will be utilized.

- d) Overburden removal and coal extraction.

The amount and area of blasting will be restricted at any one time. Blasting will be redirected if excessive fugitive dust is produced.

- e) Stockpiles (overburden, topsoil, coal).

Lime stockpiles will be treated with water when necessary. Dampening the stockpiles prevents dust blow-off. Topsoil stockpiles (which should be minimal with the underground mine) will be seeded as soon as possible with temporary quick growing grasses to provide surface stability. When possible, topsoil removed from a new area will be spread directly onto a recently reclaimed area and seeded with permanent grasses to reduce the amount that has to be stockpiled.

- f) Loading and unloading areas.

Front-end loader operators will be instructed to minimize the bucket height and thus the drop distance between the bucket end the truck bed being loaded.

- g) Crushing and other processing equipment.

Crushing equipment is addressed in the Air Quality permit shown on pages 17-4 to 17-12.

- h) Conveyors.

Conveyor equipment is addressed in the Air Quality permit shown on pages 17-4 to 17-12.

Activities under 17.2 a) through h) which are addressed and regulated as part of a separate Air Quality Permit need not be addressed on this module. Indicate which activities (or specific aspects of an activity) are addressed under a separate Air Quality Permit.

Not Applicable

17.3 Noise Control Plan

- a) List all noise sources from equipment and mining activity that will originate within the permit area.

Blasting addressed in module 16 provides the highest decibel noise that will be associated with the mining. This will be at a maximum as blasting is done to open underground mine portals. Typical equipment that will be used on site are the crushers (breakers) used with the processing plant and trucking in and out of the site, and all associated noise of the usage of that equipment. There will be no fuel powered generators on the site.

- b) Indicate the standard days and hours of operation for mobile and stationary equipment: *Plans are to work primarily one daylight shift at the site. The on-site equipment should not be operating continuously. Therefore, there should be no equipment operations, during nights, weekends, or holidays.*

- c) Indicate any of the following non-standard/extraordinary operational days and hours:

- Continuous 24 hours a day. Which equipment?
 Night time hours. Which equipment?
 Weekends. Which equipment?
 Holidays. Which equipment?
 Other. Which equipment?

- d) Are any of the following located adjacent to the proposed mine operation? Check all that apply and include distance and details.

- Residential Areas
 Schools
 Hospitals
 Churches

Details: *There are four homes along Pump Station Road west of the mining area on the opposite side of Six Mile Creek. The nearest of the homes is approximately 1,700 feet from the existing limestone surface mine. The East Bethlehem Church along Buckingham Road (SR2024) is over the ridge from the existing mine site. It is approximately 2300 feet away. The Bethlehem Center school district complex (High School, Middle School and Elementary) is north-east of the mining operation along the intersection of Morey and Crawford Roads. As the crow flies the nearest building is 1.4 miles from the site.*

- e) Describe the pre-mining environmental sound levels within the adjacent area during weekdays, night time, weekends, and holidays.

Studies to analyze noise in rural settings have shown that the higher decibel(dB) events are dictated by wind speed. The stronger the wind the higher the rating. Typically, high winds can take the ambient noise level of between 36-39 dB (dB re 20 μ PA) and raise the maximum sound of 42-46 dB. For comparisons sake a quiet library setting is considered approximately 40 dB while ordinary spoken conversation is considered at approximately 60 dB. In a rural setting, especially one such as the location of the future mine site noise variation is expected to be minimal as the primary creation of noise in any atmosphere is vehicle traffic.

With the surface limestone mine under operation at the Maggie Lynn site. The sounds of the crushers and trucking have become a part of the pre-underground mining levels as the above ground limestone operation has been in operation since 2012, though surface mining of coal has occurred near this location on and off for over 50 years. Current studies show working level from the crushing operation at a level of over 50db. In the last three years, Neiswonger has removed all generators from the site. They have purchased new electrical breakers and crushers for the stone. These are state-of-the-art machines that should aid in reducing noises.

- f) Has a noise study been conducted to characterize the pre-mining noise levels of the surrounding area and estimate the noise levels from the proposed mine operation? Yes No
 If yes, submit that study.

See Module 17.3f Attachment. Pages 17-13 to 17-16.

- g) Describe the measures (best management practices) that will be taken to mitigate noise and prevent noise from becoming a public nuisance.

Reclamation activities are to occur in one shift primarily during daylight hours. Operational hours should not coincide with the sleep Schedule of local residents working with a typical first shift job. Further steps include.

- *Blasting will only be done during daylight hours.*
- *Use of mufflers on heavy equipment as necessary*
- *The use of jake brakes will be minimized.*
- *Shielding on other equipment use*

The resulting engine noise from the equipment will be reduced with proper mufflers that undergo regular inspections. Straight pipes will not be permitted and holes in mufflers will be repaired. Louder site noises that are a part of mining activities are going to be the equipment of the limestone crushing operations, track rattling noise of large mobile equipment like a bulldozer, especially while backing up, the tailgate banging associated with material being dumped on site and the backup alarms on all vehicles that are there for notification purposes. By nature, some of these noises are perpetuated in efforts to comply with MSHA (Mining Safety and Health Administration) which are going to require louder noise just for the safety of those working around vehicles.

vehicle traffic, which normally ranged from 60 to 68 db when passing the site. The highest sound volume achieved during testing was 72.5 db for a truck going north along the road.

3. End of Pump Station Road. During the study there was no noise other than ambient wind, and there was very little wind noticeable. Typical readings were just over 30 db. The low reading often was below the reading capacity of the sound logger, which has a minimum capacity of 30 db.
4. Computer Country Doctor. The reading at this location duplicated those at location number 3. There were two exceptions as a tractor at a nearby farm just over 1,000 away was recorded at a peak level of 37.4 db, and a small engine aircraft flew directly over the site and hit a level of 55.6 db.

Table 1. Sound Test

Meter ID Map Local	Location	Distance to the Nearest edge of Mining Pit	Testing Date	Low Decibel Reading (dB)	High Decibel Reading (dB)	Typical Db Reading During Test
1	East Bethlehem Church	2,680	May 25th	36.4	80.3	42.0
			Nov 19th	33.4	75.1	36.8
2	Earl and Tracy Gilpin	3,190	May 25th	35.9	70.4	41.0
			Nov 19th	31.2	72.5	34.1
3	End of Pump Station Road	1,340	May 25th	44.8	63.8	49.0 or 56.5
			Nov 19th	<30.0	35.2	<30.0
4	203 Pump Station Road	1,590	May 25th	39.5	56.4	42.7 or 50.0
			Nov 19th	<30.0	55.6	31.2

The typical Db reading during the test would correspond to the mode (the most occurring number) of the numbers Db levels that occurred as the test was being done. There is an adjustment made as the testing at sites 3 and 4 on the May 25th study gave two noticeably different noise levels as different equipment was running during the crushing operation. This is mentioned in the summary on the preceding page. As a result, two different values are given as the typical noise level.

Estimated Noise Levels from the Proposed Mine Operation

Noise levels from the Maggie Lynn operation shall be minimally different than the noise levels generated by the current above ground mining operation. The daily sound volume at the operation is dictated by the crushing operation. The sound study shows that on the western side of the operation, away from the highwall the sound carries and is noticeable along the homes of Pump Station Road.

This will not change with the installation of the underground operation. What will change is the blasting associated with the underground mine as it moves further from the surface operation and further underground. This volume will decrease with time.