

Module 17: Air Pollution and Noise Control Plan
 [Chapters 121,123,127,129/NSMCRA 3323(a)(3)/§§ 77.455/77.575]

17.1 Processing Facilities

- a) Indicate whether or not there are any processing facilities in the permit area. (Key to Exhibit 9) and specify the mineral(s) to be processed.

Type of Processing Facility	YES	NO	If YES: DRY	WET	Minerals/Product
Crushing	☒	☐	☒	☐	Sandstone
Screening	☒	☐	☒	☐	Sandstone
Cleaning	☒	☐	☒	☐	Sandstone
Stockpiling	☒	☐	☒	☐	Sandstone

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

This mine will excavate Freeport sandstone out of the mining area and haul or convey it to the processing area. Processing may include screening for size separation and/or cleaning for particle size separation. The product will be comprised of natural sandstone. Average production may vary from 200-400 tph pending market conditions.

- c) Provide the date that the DEP Regional Air Quality Office was contacted or, if applicable, provide a copy of the DEP Air Quality Program's determination to grant an exemption from the Air Quality Permit requirements and of any authorizations granted under the Air Quality General Permit for Portable Nonmetallic Mineral Processing Plants (BAQ-GPA/GP-3).

Note: All crushing and screening of noncoal minerals other than freeport sandstone will require a separate Air Quality Permit from the DEP Regional Office Air Quality Program unless that Program makes a determination to grant an exemption. Crushing and/or screening of sand and gravel will require a separate Air Quality Permit from the DEP Regional Office Air Quality Program except for wet sand and gravel operations (screening only) and wet or dry sand and gravel operations (crushing and/or screening) unconsolidated material with a rated capacity of processing less than 150 tons per hour unless that Program makes a determination to grant an exemption. BAQ-GPA/GP-3 may be used for authorizing the construction, operation, and modification of portable nonmetallic mineral processing plants that will be located at the mine site.

- d) Is the processing facility to be operated by the mining permittee? Yes ☒ No ☐
 If so, will the Air Quality permit be held by the mining permittee or a third party?

Permittee ☒

Third Party ☐

17.2 Air Pollution Control Plan

Provide a description of the air pollution control plan including what measures will be taken to reduce dust from the following activities:

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

The access roads and haul roads will be periodically sprayed with water to control the dust.

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

Commercial trucks will be covered with tarpaulins when hauling. The maximum speed limit is 15 m.p.h. to help aid in dust control.

- c) Drilling operation.

If any drilling activities need to occur, the drill rig will have a hood installed around the bit to suppress the dust.

d) Overburden removal and mineral extraction

The proposed mineral extraction is primarily dry and therefore on-site water will be used for dust suppression. Any trees and brush that can remain around the mining area will be used to act as a barrier to reduce dust.

e) Stockpiles (overburden, topsoil, product).

A temporary seed mixture will be applied to the topsoil or overburden soil storage areas to prevent wind erosion. See Module 23 for the temporary seed mixture. Water will be applied to the stockpile area to prevent dust.

f) Loading and unloading areas.

Dust prone areas will be covered with aggregate to control dust and dirt build up. This will also help reduce sediment tracking which leads to airborne dust.

g) Crushing and other processing equipment.

Crushers, screens or other equipment will be fitted with water sprays at critical points to reduce dust and particulate matter emissions.

h) Conveyors.

Conveyors will be designed to limit drop height where possible to reduce dust emissions.

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

General permits will be obtained for site equipment and coordinated with DEP Air Quality.

17.3 Noise Control Plan

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

The excavators, haul trucks, front end loaders, dozers, water trucks, electric generator, water pumps, service trucks, back up alarms on equipment, crushers, screeners, and conveyors that will be used within the permit area will be the sources of noise.

b) Indicate the standard days and hours of operation for mobile and stationary equipment:

The standard hours of operation vary between 6AM and 4PM, approximately 6 days a week.

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? Saturdays only. Loaders for customer sales, mining and maintenance 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: The residential areas adjacent to the proposed mine operation are primarily composed of a small, rural town. These homes are close together and situated on smaller plots of land, offering residents a

sparse, suburban feel. In addition to these residential properties, there is a local American Legion (Post 279) nearby and two Bed-and-Breakfasts in the vicinity. See the Exhibit Maps.

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

The pre-mining environmental sound levels in the adjacent area varies depending on the time of day, weekday or weekend, and whether it's a holiday. In general, sound levels in this area are relatively low during the week and at night, with a moderate increase in noise on weekends and holidays. Noise from the main road, local events, and residential activities will create a noticeable change in sound levels, especially during social periods. The American Legion and Bed-and-Breakfasts may see some activity, such as people coming and going, but it's likely limited to moderate noise levels.

- 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.

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

Mobile equipment on site will be equipped with mufflers per the manufacturer's standards. The site will have berms installed which will act as a noise barrier. Also, forestland buffer around the site will be left in place as an additional noise barrier.

Several other common best management practices (BMPs) are suggested for consideration to further reduce noise. Typical BMPs are as follows:

- vegetation barriers (especially evergreen-type)
- use of electric equipment
- white noise backup alarms and/or strobe lighting system
- use of rubber-tire or -tracked equipment vs. metal-tracked equipment
- limitation of operating hours
- enclosing crushing equipment and screening towers
- regular preventative maintenance to insure quiet operation of machinery
- foam insulation included on enclosures around crushing equipment,
- rubber lined dump hoppers
- mufflers on equipment exhaust systems and acoustical walls/barriers
- prohibition of engine brakes
- improved exhaust systems on equipment
- directing noise source direction away from the sensitive receptor