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December 5, 2024

Diane Roote, P.G.  
Department of Environmental Protection  
New Stanton District Mining Office  
131 Broadview Road  
New Stanton, PA 15672

**Re: Large Noncoal Mining Application  
Neiswonger Construction, Inc.  
Maggie Lynn Underground Mine  
SMP-Application No. 63192001  
NPDES Permit Application No. PA 0278360  
Deemston Borough, Washington County**

Dear Ms. Roote:

So that processing may continue regarding the above referenced application, enclosed please find three paper copies and an electronic copy on CD of our response to your permit review letter dated November 8, 2024. Numbered items correspond to your numbered comments.

**Updates Exhibits**

1. Surveyors were sent on site on November 18<sup>th</sup>. The areas in question were surveyed and are mapped on all the enclosed exhibits. The 100' highwall offsets have also been mapped accordingly. As per the discussions and Consent Order & Agreement with Neiswonger, issues resulting from the current developed highwalls will be addressed in a future submission to the Department.
2. During the surveyors visit. The buried water line and pumping location were located and are marked on the mapping

### **Module 10 - Bonding**

3. The bonding information has been revised and is submitted with this submission in accordance with the following.
  - a. \$3,000 added to bonding for the removal of burned-out portable processing equipment is acknowledged in the updated bonding materials within this submission.
  - b. \$1,000 added to bonding for the removal of a burned-out rock truck is acknowledged in the updated bonding materials within this submission
  - c. \$1,000 added to bonding for the removal of garbage/scrap from the site is acknowledged in the updated bonding materials within this submission.
  - d. The amount on form 5600-FM-BMP0474 is shown as \$965,873 matching amount of the DEP Calculation form on page A-5. This amount is shown as rounded to \$966,000 on form 5600-FM-BMP0474.

### **Wetland Impact and Wetland Identification – Update Exhibits**

4. Four wetlands on properties 8 and 9 were located in the field on November 18<sup>th</sup>. The GPS locations have been added to the mapping included with this submission.
5. The following has been inserted as the third paragraph on with Module 15 on page 15-12. The inclusion of this paragraph affects the spacing of all pages from 15-12 to 15-19 and all are included with this revision.

*“Geotech Engineering Inc. agrees that MP26 is part of the recharge area to Wetland E but has been essentially dewatered by mining activities on the Maggie Lynn site. Fortunately, the Sewickley Coal Seam aquitard provides an additional source (see the previous paragraph). While this source is still present a majority of the time, flows at MP 25 (i.e. Wetland E) have decreased somewhat and may be impacting Wetland E to a certain degree. The fact that the Neiswonger “Maggie Lynn” site is included in an “D3 Extreme Drought” designation as per the November 19, 2024 US Drought Monitor map of Pennsylvania is also a contributing factor.”*

Neiswonger Construction Inc. also acknowledges that there is a pending Consent Order and Agreement being discussed on this issue but is not yet final.

### **Module 17**

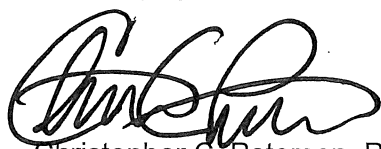
6. Revisions to Module 17 have been made based on the following items:
  - a. In the narrative of Module 17.2a on page 17-1, language that states the access road will be surfaced with stone or paved has been added to the response.
  - b. In the narrative of 17.2a on page 17-1 the language stating that “The road will be watered at least daily during dry weather.” Has been replaced as specified in the language of the review letter.

- c. In the narrative of Module 17.2b on page 17-2 language of the review letter has been added after the statement regarding tarping, and a note has been added prior to section 17.3 Noise Control Plan that mentions that watering and tarping are a part of special conditions and the compliance order.
  - d. In the narrative of Module 17.2c on page 17-2 language of the review letter regarding the use of only drills with water sprays has been added.
  - e. In the narrative of Module 17.2e on page 17-2 language has been added that discusses all reasonable action specified in §123.1 (c) will be undertaken to prevent dust from going offsite. It discusses water trucks being on site and the treatment of stockpiles.
7. The Air Quality monitoring control program has been updated with the following.
- a. The date of the two North Starr conveyors of item number 5 have been corrected with an installation date of June 2021.
  - b. The emission restrictions on page 17-22 have been altered as shown.
    - i. Item number 6 has been altered to state that it applies only to clearing and grubbing waste.
    - ii. "The Pennsylvania Department of Environmental Protection - Southwest Regional Office has not approved any sources that fall into this category to date" has been added to item number 8 on page 17-22.
  - c. Language from §123.1 (c) and the GP3 as specified in the review letter have been added on pages 17-22 and 17-23 within the section titled Emission Restrictions – Fugitive particulate matter. These have been added as sections a, b and c.
  - d. The following changes have been made under the section titled emission Restrictions – Limitations.
    - i. Language regarding a summary of the permit limits has been replaced with language that mentions potential emissions.
    - ii. The language of the review letter has been placed after the Total Controlled PM emission and PM-10 emissions summary. This is near the middle of page 17-24.
  - e. A sentence regarding a 5 mph speed limit over the equitable gas line has been added near the end of the first paragraph as part of the Compliance narrative, starting at the bottom of page 17-24.
  - f. Two sentences within the compliance section of page 17-24 have been removed and replaced with the language from the review letter.

- g. Under item number 1 of the Monitoring Requirements on page 17-25. Weekly inspections and weekly monitoring have been replaced with daily inspection and daily monitoring.
- h. Under item number 3 of the Monitoring Requirements on page 17-25. Item 3 has been replaced with the language from the review letter.

Should you have any questions or require any additional information, please do not hesitate to contact us at our Morrisdale office.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Peterson", written in a cursive style.

Christopher C. Peterson, PE  
Mining Engineer



## BOND CALCULATION SUMMARY-NONCOAL CONSOLIDATED

These are phase One bond Calculation using the 2024 BRGs

|  |   |
|--|---|
| Permittee: Neiswonger Construction, Inc. | Date: December 2024                     |
| Permit #: 63192001                       | Mine Name: Maggie Lynn Underground Mine |
| Municipality: Deemston Borough           | County: Washington                      |

| Operation<br>(see attached calculations)                          | Quantity | Units            | Rate \$/Unit            | Bond Amount      |
|---|----------|------------------|-------------------------|------------------|
| Mining Area (i.e. minor grading/vegetation)                       | 9.5      | Acres            | \$3,500                 | \$33,250         |
| Support Area (revegetation)                                       | 54.8     | Acres            | \$1,830.                | \$100,284        |
| Earthmoving (>500'/<1000')  | 107,341  | Cubic yards      | \$2.50                  | \$268,353        |
| Earthmoving (<2500')  | 42,674   | Cubic Yards      | \$3.04                  | \$129,729        |
| Highwall Blasting   |          |                  |                         |                  |
| Up to 20 ft Height  | 0        | Linear foot      | \$10                    | 0                |
| >20 up to 30 Height   | 670      | Linear foot      | \$20                    | \$13,400         |
| >30 up to 40 Height   | 700      | Linear foot      | \$40                    | \$28,000         |
| >40 up to 50 Height   | 1030     | Linear foot      | \$55                    | \$56,650         |
| >50 Height  |          | Linear foot      | \$75                    |                  |
| Mine Sealing  | 4        | Calculation      | \$44,696                | \$178,784        |
| Ponds   | 2        | No of Ponds      | \$3,800                 | \$7,600          |
| Demolition of Structures  | Lump Sum | Calculation      |                         | \$24,048         |
| Removal of Processing Equipment, burned rock truck, garbage/scrap | Lump Sum | Estimated Cost   |                         | \$5,000          |
| Large Tires   | 40       | Each             | \$300                   | \$12,000         |
| Other Costs – Mine borehole Seal                                  | See A-8  | Filling cost/ft. | \$6.5/ft<br>\$1,850 min | \$8,153          |
| Other Costs – Replace Riparian Buffer                             | 8.3      | Acres            | \$2,250                 | \$18,675         |
| Other Costs – Replant Forest land trees                           | 38.0     | Acres            | 680<br>(\$1.00)         | \$25,840         |
| Topsoil to Pit #2   | 7,583    | Cubic yards      | \$2.50                  | \$18,958         |
| Subtotal  |          |                  |                         | \$923,724        |
| Mobilization/Demobilization                                       | Lump Sum | Calculation      | 4%                      | \$37,149         |
|   |          |                  |                         |                  |
| <b>Total Reclamation Cost</b>                                     |          |                  |                         | <b>\$965,873</b> |

- Bonding based on Noncoal Bond Rate Guideline (BRGs) dated April 1, 2024
- Bond rates are for phase one of the mining and do not include Pit

|  |
|--|
| <b>Total Bond<br/>Required<br/>\$966,000</b> |
|--|



|                     |                               |
|---------------------|-------------------------------|
| Date of Calculation | Revised October, 2024         |
| Company             | Neiswonger Construction, Inc. |
| SMP#                | 63192001                      |
| Mine Name           | Maggie Lynn Underground Mine  |
| Township            | Deemston Borough              |
| County              | Washington                    |

**Bonding Summary**

|   |       |       |
|---|-------|-------|
| Total number of acres bonded for mining:  | 9.5   | acres |
| High wall Height:                         | 170.0 |       |
| Total number of acres bonded for support: | 54.8  | acres |

| Category  | Dollar amount |
|---|---------------|
| Mining Area 9.5 acres   | \$33,250      |
| Support Area 54.8 acres   | \$100,284     |
| Bond to backfill site   | \$398,082     |
| Reclamation for unconsolidated material                                       | \$0           |
| Blasting to achieve reclamation slopes  | \$98,050      |
| Mine Sealing  | \$178,784     |
| Sediment Pond and Treatment Pond Cost   | \$7,600       |
| Removal of processing equipment, burned rock truck, removal of garbage/scrap  | \$5,000       |
| Large Tires   | \$12,000      |
| Load/Haul/Dump/Grad Pit#2 Topsoil   | \$18,958      |
| Mine Borehole sealing costs   | \$8,153       |
| Cost to replace Riparian Buffer   | \$18,675      |
| Cost to replant forrestland trees   | \$25,840      |
| Demolition Costs (Enter costs estimated using Means Heavy Construction Costs) | \$24,048      |
| Sub Total:  | \$928,724     |
| Mobilization Costs  | \$37,149      |

|                                 |                  |                                  |
|---------------------------------|------------------|----------------------------------|
| <b>TOTAL BOND LIABILITY</b>     | <b>\$965,873</b> | Total Bond Required<br>\$966,000 |
| <b>EXISTING BOND ON SITE</b>    | <b>\$0</b>       |                                  |
| <b>ADDITIONAL BOND REQUIRED</b> | <b>\$965,873</b> |                                  |

Sample points 25, 26, 27, and 73 are in the proximity of the Benwood Limestone/Sewickley horizon and are found along the southwest boundary of the proposed permit. All of these are springs except for sample point 25, which is a small wetland discharge along Tenmile Creek. The source for these (26, 27, 73) includes a combination of the Benwood Limestone (alkalinity between 241-436 mg/l) and the Waynesburg coal seam (increased sulfate levels between 28-404 mg/l). Sample points 26 and 27 will likely dry up as the recharge for these points is cut off. However, there is no defined purpose for either point. Sample point 73 is located near the bottom of the Benwood Limestone and is not expected to be significantly impacted due to the no mining barriers being established for the Benwood Limestone. No underground mining activities will occur within 150 +/- feet of this sample point.

In regard to sample point 25, it appears that it is sourced by the Benwood Limestone (alkalinity between 229-366 mg/l) but has some Sewickley/Waynesburg Coal Seam influence as evidenced by (a) an increase in the sulfate levels (196-539 mg/l) and (b) its location/elevation in relation to the active Maggie Lynn surface quarry. This low flow wetland discharge is, most likely, a result of (1) a combination of some surface flow (from the quarry) and (2) groundwater associated with the Sewickley Coal Seam aquitard. The combination of flows migrate down-dip and down-gradient through weathered (incompetent) material to emanate as a small wetland along the bank of Tenmile Creek. Except for some increased sulfate levels, the water quality exhibits a pH in the range of 7.47 to 8.56, alkalinity ranging from 229 ppm to 366 ppm, iron ranged from 0.55 ppm to 3.93 ppm, manganese ranged from <0.05 ppm to 0.48 ppm, aluminum ranged from 0.61 ppm to 3.73 ppm, and sulfates ranged from 196.3 ppm to 539 ppm. A PVC pipe was installed at sample point 25 in February 2018, as previous samples indicated some increases in iron and aluminum, most likely due to increased suspended solids (TSS). While the TSS is still elevated in some of the samples, the quality results indicate that, while some minor amount of surface/groundwater flow (from the current and proposed limestone deep mine) may infiltrate into the Sewickley Horizon during or postmining, the quality of any potential discharge (s) would be similar to sample point 25 and not result in any significant water quality issues.

Geotech Engineering Inc. agrees that MP26 is part of the recharge area to Wetland E but has been essentially dewatered by mining activities on the Maggie Lynn site. Fortunately, the Sewickley Coal Seam aquitard provides an additional source (see the previous paragraph). While this source is still present a majority of the time, flows at MP 25 (i.e. Wetland E) have decreased somewhat and may be impacting Wetland E to a certain degree. The fact that the Neiswonger "Maggie Lynn" site is included in an "D3 Extreme Drought" designation as per the November 19, 2024 US Drought Monitor map of Pennsylvania is also a contributing factor.

In regard to any effects on Tenmile Creek, the stratigraphic dip is such that the "lowest" section of the mine will be located at the extreme northwestern portion of the proposed site as shown on Exhibit 6.2 (See Benwood Limestone structural contours). Please also see the Exhibit 15.2 map which shows the proposed limits of the underground section of the proposed Benwood Limestone mine. As can be seen, there will be no limestone removal operations below the 820 foot (msl) contour elevation in the western section of the permit area. This prohibition was included to ensure that there will be no adverse quantitative impacts to Tenmile Creek (NOTE: Tenmile Creek elevations are between 820 feet and 815 feet (msl) in the area adjacent to the proposed lowest section of the mine. (I.e. 820 msl is the elevation of sample point 31 (Upstream Tenmile Creek) while 815 msl is the elevation of sample point 1 (Midpoint Tenmile Creek)). As such, all underground mining activities will be above the normal pool elevations of Tenmile Creek.

In addition, please refer to Exhibits 6.2, 9, and 15.2 along with Module 10.1, which include information on the 100-year flood plain elevations along Tenmile Creek in the area of the Maggie Lynn Underground Mine. In the event that any flooding occurs which would increase the level of Tenmile Creek to 820 msl or higher in the downdip section of the underground mine, Neiswonger Construction, Inc. will review the situation and take appropriate actions to ensure safety of all personnel until the flooding event is over.

Please note that, although the structure contours for the Benwood Limestone on the Exhibit 6.2 map show the base of the Benwood Limestone to be in the vicinity of 810 +/- at the extreme western (I.e. downdip) section of the proposed permit, the proposed operations plan states that that the bottom five (5) feet of the Benwood Limestone will remain intact to provide a buffer of intact limestone to prohibit downward migration of any minor amounts of groundwater encountered in the deep mine. Therefore, in order to compute the bottom elevation of actual limestone deep mining, one will have to add five (5') feet to the elevations as shown on Exhibits 6.2 and 15.2.

In addition, as shown on Exhibits 9 and 15.2, a 150 foot "no underground mining" barrier will be placed along Tenmile Creek from a location starting 100 feet northwest of the farthest upstream section of the surface Limestone Quarry highwall and will extend upstream to the end of the Limestone deep mine permit. This was included due to the potential of stress relief fracturing along the steep portion of the hill side above Tenmile Creek. The barrier will mitigate the potential for (a) surface and groundwater infiltration into the proposed limestone deep mine and (b) any encountered groundwater (in the proposed limestone deep mine) to migrate into Tenmile Creek.

c) Describe measures taken to ensure the return of the hydrologic system to its premining condition.

The mining will be room and pillar with adequate pillar size maintained to prevent mine subsidence. As discussed in previous sections of this module, measures are proposed to protect the hydrologic system of the project area. The proposed mining will include maintaining a fifteen (15') foot "cap rock" roof above the mine to protect from subsidence fractures to develop that would drain water bearing zones above the proposed underground mine. Also proposed is a five (5') foot limestone floor that will impede groundwater from migrating downward into the Sewickley horizon or lower.

No mining is proposed below one hundred (100') feet of cover below any streams within the underground permit area. This will ensure that no streams are dewatered as a result of mining.

A one hundred fifty (150') foot barrier will be maintained along Tenmile Creek to prevent water from impacting Tenmile Creek from the underground mining due to stress fracturing. The one hundred fifty (150') foot barrier was derived from a review of published sources as listed below along with actual hydrologic conditions present along the steep area along Tenmile Creek within the hundred fifty (150') foot barrier area. The references state, among other items, that where stress relief fractures are present, the "greatest frequency and degree of weathering" occurs within two hundred (200') feet laterally of the outcrop area and the effects gradually disappear as you move further from the outcrop and gain more cover.

In regard to the hydrologic conditions in the steep area above Tenmile Creek, there is a general lack of groundwater discharges (except for sample point 73) along the steep area of the hillside. As such, while there is no confirmed evidence that stress relief fractures are present, it is prudent to include measures to minimize any adverse impacts should they be present.

As such, the operations plan includes a prohibition of any deep mining within one hundred fifty (150') feet in the area shown on the Exhibit 15.2

Literature cited: Rose et al. 1998. Coal Mine Drainage Prediction and Pollution in Pennsylvania, predominately Chapter 2, Callahan, T., Fleeger, G.M., Barnes, S., Dalberto, A., Pennsylvania Department of Environmental Protection, Harrisburg, PA., pp 2-7 and 2-8 along with pp 2-14 to 2-18, 2-21, 2-27, to 2-28. (NOTE: Other literature sources in Chapter 2 were reviewed and are included in the "Literature Cited" section at the end of Chapter 2.

d) Address the potential impacts of the underground mining on public and private water supplies.

Only six (6) private water supplies, along with the one cistern on parcel 11 which collects rainwater, were identified. None of these supplies lie within the proposed underground mine permit area.

Spring supply, sample point 34, is used for outside purposes. This spring lies just within 1000 feet north of the proposed underground portion of the permit area. This water supply occurs from the local flow system below the Waynesburg horizon. The recharge area for this spring is with topography to the east and northeast, which is located north of the proposed mining. This spring will not be affected.

Also located on the same property is drilled well supply 35, which is used for outdoor purposes including filling the swimming pool. The depth of the well is not known. Recharge to this well supply is with topography and the structural orientation of confined beds. This recharge area is to the east with Unnamed Tributary "G" to Tenmile Creek lying between the proposed mining area and the well. This well will not be impacted. The pump for this well is currently not functioning and may not be repaired.

Private well supply 58 is the primary source of water for the home on parcel 12. The depth of the well is unknown, but more than likely intercepts the intermediate groundwater flow system which is recharged with both topography and the structural orientation of confined beds. The recharge area for this well lies to the east which will not be affected by the proposed mining.

A hand dug well, identified as sample point 76, is located north of the eastern section of the underground permit area. The pump is currently not functioning. A recent interview with the property owner stated that she has no plans on using the well and has public water. The well is recharged by topography in an area that will not be impacted by the proposed mining.

Two (2) additional water supplies have been identified north of the proposed permit area. Dug well sample point 77 is twelve (12') feet deep, intercepting the local water table. Recharge to this well is with topography to the north and will not be affected. Private well sample point 78 is located just north of Unnamed Tributary "G", its depth is not known. The well lies above the top of the Benwood Limestone and should remain unaffected.

Tri-County Joint Municipal Authority has a surface water intake on the Monongahela River, 6.6 miles downstream from the site. The proposed underground mine plan has been designed to prevent any discharges from occurring during and after completion of the mining of the Benwood Limestone. Surface water from the entry and open pit area will be controlled, with erosion and sedimentation facilities installed to ensure that any water flowing into Tenmile Creek meets all effluent standards established by the Department.

- e) Design and outline a monitoring program specific to the potential impacts (the monitoring program must specifically address areas where post-mining discharges may develop and where water supplies may be adversely impacted). Include a representative number of existing groundwater supplies in the monitoring plan to demonstrate quantity and quality impacts during the life of the mine (background sampling and monitoring data should be collected as per Module 8.2).

The monitoring program for Tenmile Creek includes an intermediate sample point number 1, downstream monitoring points MP-4, and 29; and upstream monitoring point 31. Spring sample points 26 and 27 and wetland discharge 25 will monitor water from the quarry pit area and entry area. Spring sample point 73 will monitor the base of the Benwood Limestone downgradient of the proposed underground permit area.

Located along the eastern and southeastern section of the permit area is Unnamed Tributary "D" to Tenmile Creek which is monitored upstream at sample points 9 and 11. An intermediate point is located at 13, with the downstream monitoring point 28.

Unnamed Tributary "E" is located in the central section of the permit area with the headwaters originating above the haulroad. The stream flows through the adjacent Hawkins site until reaching the reconstructed stream channel before flowing into Tenmile Creek. The upstream monitoring points on the Western Branch of Unnamed Tributary "E" are points 17 (monthly flow only), 21 (monthly flow only), C (monthly flow and quarterly water sample), E (monthly flow only), and F (monthly flow only). On the Eastern Branch of Unnamed Tributary "E" is the upstream monitoring point 5 (monthly flow and quarterly water sample), D (monthly flow only), G (monthly flow only), and H (monthly flow only). Below the confluence of the Eastern and Western Branches of Unnamed Tributary "E" is monthly flow measurement station B, spring point 15 (monthly flow only) and monthly flow station A. The intermediate point is 14 (monthly flow and quarterly water sample), with the downstream point of 42, within the reconstructed stream channel.

Originating north of the permit area is Unnamed Tributary "G" to Tenmile Creek, which will be monitored upstream at sample point 61. The stream then flows through a portion of the northern section of the permit area and then will be monitored at intermediate sample point 41. The downstream monitoring point is 30.

Located northwest and downgradient of the underground permit area is an unnamed tributary that flows into Unnamed Tributary "G". A monitoring point 54 has been established at the downstream location of this stream.

Located east of the proposed underground permit area is ephemeral Unnamed Tributary "A" to Black Dog Hollow. This stream is upgradient of the mine site. Upstream monitoring points are 32 and 66, with the downstream monitoring point designated sample point 67.

Unnamed Tributary "B" to Black Dog Hollow is also located east of the permit area and upgradient. The upstream monitoring point is 33, with the downstream monitoring point designated sample number 68.

No private well supply is threatened. Most of the homes in the area are utilizing public water. Spring sample point 73 is the proposed downgradient monitoring point.

Monitoring well MW-TH-2 will monitor the static water level in the upgradient section of the proposed deep mine, MW-TH-4 the intermediate section, and MW-

TH-6 downgradient. The Wash Plant Well, MW-WPW will monitor the Clyde mine pool elevation.

- f) Include information regarding depth to groundwater, uses of groundwater and any known groundwater problems over the proposed underground mine.

Test holes TH-1 through TH-7 were drilled within the proposed underground permit area. TH-1 is located in the east - central section of the permit area just north of the haulroad. The first one hundred seventy (170') feet of the drill hole was air rotary drilled and did not encounter any measurable groundwater. The rest of the test hole was continuously cored. The measured static water level was found just above the Waynesburg coal seam at a depth of forty nine (49') feet from the surface.

Located near the southeastern section of the permit area is test hole TH-2. The first one hundred thirty five (135') feet of the drill hole was air rotary, with no measurable groundwater encountered. The remaining portion of the drill hole was continuously cored. The measured static water level was found to be 70.3 feet deep from the surface.

Test hole TH-3 is in the northeastern section of the permit area. Water was encountered at forty (40') feet where 1 gpm was measured. Two (2) static water levels were obtained. In January 2018 the water level was found to be 61.8 feet in depth. In February 2018 the water level was measured at 57.2 feet.

Located in the northcentral section of the permit area is drill hole TH-4. Cuttings were wet at a shallow depth of thirteen (13') feet at this location. One gallon per minute (1 gpm) was found at a depth of seventy five (75') feet, just above the Waynesburg coal seam. The January 2018 static water level was measured at a depth of 69.1 feet, and February 2018 it was measured at 67.75 feet.

Test hole TH-5 encountered the Waynesburg coal seam pit floor at a depth of fifty five (55') feet. No groundwater was found at this drill hole location.

Located in the northwestern section of the permit area is drill hole TH-6. At a depth of two hundred (200') feet 1 gpm of water was encountered. The static water measured in January 2018 was found at a depth of 153.7 feet, and in February 2018 it was found at a depth of 143.7 feet.

Test hole TH-7 is located in the southeastern section of the permit. At a depth of forty three (43') feet 1 gpm of water was encountered. The January 2018 static water level was found to be 46.4 feet, and in February 2018 the water level was measured at 43.2 feet.

Hole No. 1 and 2 were drilled in the proposed revision area on the west-central section of the permit area. Hole No. 1 was damp at an elevation of 824.4, which correlates to the bottom of the Benwood Limestone. The static water level measured for Hole No. 2 was found at a depth of 18.6 feet and was associated with a substantial clay unit.

- g) Provide a surface/groundwater inventory including elevation and flow rate of springs, seeps and mine discharges located over the proposed mine and within 1,000 ft. of the permit area. Include information regarding static water levels for inventoried wells throughout the permit area.

See each individual Module 8.1A for flow rates of springs, seeps and mine discharges. As discussed in Module 8, access to private well supply, sample point 35, to obtain a water level would not be easy. The owner of this supply is hesitant to allow access to the well.

A static water level was obtained at private well supply, sample point 58, on September 24, 2019. The water level was found to be 1066.3' (msl). The projected base of the Benwood limestone is at 835 feet (msl).

- h) If water will be used in the underground mine complex (for dust control, etc.), describe the source of water and approximate daily usage rate in gallons. If groundwater wells will be employed, describe the target aquifer and any potential adverse hydrologic impacts from pumping the wells.

The operator will obtain water from Pond P-1 as needed.

**April 2024 Revision.** As per additional Department concerns, there is a separate groundwater component associated with the existing pits. As of April 2024, there are two separate pits associated with previous Benwood Limestone mining associated with surface mine permit 63100401. This main pit has existed for many years and will remain throughout the proposed Benwood Limestone deep mining. This main pit is approximately 200 feet in height and consists of about 10-12 acres. The other pit is smaller and will be backfilled prior to the opening of the proposed deep mine. Both pits act as pseudo "cones of depression" as groundwater seepage zones from the highwall exist. The seepage ends up in the pit and is utilized for haul road watering, etc. The seepage zones have been noted previously and will likely be present throughout the life of the proposed deep mine. On March 21, 2024, personnel from GeoTech Engineering Inc. noted three separate areas of groundwater seepage associated with stratigraphy in the main highwall. A review of core hole B-1 (located just above the highwall) indicates areas of fractured and broken up material located at elevations at depths of 25, 35-50, and 100-110 feet from the surface. This correlates well with visual observations and photographs on March 21, 2024. It is noted that there was some pit water noted on March 21, 2024.

It is difficult to estimate the amount of groundwater emanating from the highwall due to seasonal fluctuations etc, however, if one uses 0.5-1.0 gpm per acre of water to be expected from the highwall, a value of about 5-10 gpm could be expected. NOTE: This is using the same formula that is in Module 8.3(a) and an estimated recharge of 10 acres.

In regard to concerns about sufficient water being available for dust suppression, please refer to Module 17.

## 15.7 Geology

Provide (at a minimum) 2 geologic cross sections- covering the proposed underground mining area: one section perpendicular to strike and the other parallel to strike. Show all stratigraphic units down to and including the first aquifer system that may be affected below the lowest mineral extraction level (key location of cross section- to Exhibit 6.2 map). Include borehole locations over the extent of the deep mine permit area. Describe the local geologic structure in the area of the proposed underground mine and relate it to the regional geologic structure.

Two (2) geologic cross sections were developed for the proposed underground mining of the Benwood Limestone.

Cross Section A - B is drawn from one thousand (1000') feet west-northwest of the permit area, intercepts the Unnamed Tributary "G" to Tenmile Creek, test holes TH-6, TH-4, TH-3, Morey Road, the eastern boundary of the permit area, test hole Y-7, test hole Y-6, and Ephemeral Tributary "A" to Black Dog Hollow, east of the permit area. This cross section is drawn generally along the dip of the Benwood Limestone.

Cross Section C - D is drawn from one thousand (1000') feet southeast of the permit area, intercepts Arnold Road, Tenmile Creek, sediment pond 001, test hole DH-6, the haulroad, test hole TH-1, test hole TH-3, Leonard Road, Morey Road, SR 2024, to one thousand (1000') feet north - northeast of the permit area. This cross section is constructed generally along the strike of the Benwood Limestone. The proposed mining within the Maggie Lynn Underground Mine permit area is situated in the Appalachian Plateaus Province. The sedimentary strata, in this area of the Province, have been folded to varying degrees by a series of anticlines and synclines. Included in this module are two (2) published regional geologic structure maps. The general orientation of the fold axes are in the southwest - northeast direction. This anticline - syncline series extends

throughout most of the region from Ohio eastward to the Allegheny Front in central Pennsylvania, where the Valley and Ridge Province begins. Low magnitude and broad folds dominate the immediate area. The Maggie Lynn Mine is situated on the western flank of the Belle Vernon Anticline, approximately six hundred (600') feet northwest of the axis of the anticline. The underground permit area lies east of the axis of the Waynesburg Syncline which lies approximately 2.0 miles to the west - northwest.

The local geologic structure contours of the base of the Benwood Limestone, shown on the Exhibit 6.2 Map, has been developed based on drill hole information and published geologic mapping. The limestone proposed to be mined reaches a maximum elevation of over 890 feet (msl) east of the permit area and a minimum of less than 810 feet (msl) west of the permit area. Based on drill holes TH-2, TH-3, and TH-6 the strike of the Benwood Limestone is N35°E and dipping the west - northwest at 1.2%. The local geology agrees well with the regional structural trend.

### **15.8 Sealing Plan**

Provide a plan regarding the sealing/closure of all underground openings (drifts, shafts, slopes, boreholes, etc.). Include drawings, schematics showing bulkhead/seal designs and justify design vs. expected hydraulic head. All plans and maps must be sealed by a registered professional engineer.

The long term plan for this site, after the limestone mining activities have ceased, will be to convert the underground mine site into a long term storage facility. Waste rock from the deep mine and stored spoil material removed during the initial excavation of the pit will be utilized for backfilling as much as the highwall entry area as possible, without restricting access to the underground storage area, but if sealing of the portals is deemed necessary a sealing plan is shown on page 15-21.

### **15.9 Bonding for Underground Openings**

Provide a breakdown of the projected costs needed to seal all openings (labor, material, etc.) and complete the attached FORM 15.9 Openings/Mine Seals.

The cost to seal four portal openings of pit #1 are shown on page 15-20.

### **15.10 Underground Disposal**

This section is to be completed if water, wastes, or backfill material will be placed in underground mine voids. As a general rule, the disposal or placement of materials underground will be restricted to processing waste associated with mineral being mined, underground mine development waste, mine drainage treatment sludge, fly ash, flue gas desulfurization sludge and inert materials for mine stabilization projects.

- a) Identify the nature and source(s) of the waste to be disposed of underground.

Waste from processing the limestone material being mined at this site may be disposed of in the inactive sections of the underground mine that no longer need to be accessed. The location of the disposal areas will be in updip inactive sections of the deep mine to ensure that they will not be inundated with any possible flooding event. Also, there will be no processing waste located in the flow path of any updip water that would flow downdip through the deep mine.

- b) Provide maps and drawings illustrating the facilities and operations involved in transporting the waste from its point of origin to the final repository (Describe the design and operation of the waste disposal system).

On-site mine equipment will be used to haul the processing waste from the surface processing area to the inactive underground mine sections for final placement. It is difficult to provide any maps or drawings currently as the surface footprint is likely to be different from the current configuration.

- c) Attach excerpts of mine maps illustrating the area of the workings to be filled, show flow paths of hydraulically transported materials, underground retention structures, discharge points, and monitoring points.

The current Exhibit 15.2 references the processing waste may be placed in inactive sections of the Maggie Lynn deep mine. Maps detailing the areas of processing waste placement will be provided to the Department prior to underground disposal of the material. Please refer to the notation on Module 15.2 which references the potential for the disposal of limestone processing waste within the Maggie Lynn Deep Mine.

- d) Address possible adverse hydrologic impacts of the operation and the measures and monitoring which will be employed to prevent or mitigate their occurrence.

As the waste produced from processing the limestone should be alkaline in nature with minimal amounts of metals (i.e. iron, manganese and aluminum), there should be negligible hydrologic impacts to the waters of the commonwealth based on the proposed underground disposal.

- e) Describe the lithology, thickness and attitude of the strata which comprise the floor of the repository area.

The floor of the repository area would consist of the 5 feet of Benwood Limestone that will remain after mining. Please refer to the Module 7.2 for the geologic description of the floor strata.

- f) Describe the ownership rights which allow the repository to be used for waste disposal.

Neiswonger Construction, Inc. has the right to utilize the site for the placement of processing waste based on landowner lease agreements.

- g) Provide a chemical analysis of the mine pool in which water, wastes or other materials will be placed.

The water sample results reported in Module 8.1(A) for monitoring well MW-1 and sample point MP73 reflect the water quality of the potential mine pool. If and when processing waste is disposed and a mine pool develops, sampling of the mine pool will be obtained to ensure adequate water quality is present.

- h) Provide documentation that the Mine Safety and Health Administration has approved the underground disposal.

Prior to conducting underground disposal of any materials, a plan for disposal will be submitted to both BMS and Mine and Safety and Health Administration (MSHA) for evaluation. BMS/MSHA approval must be obtained prior to underground disposal activity.

### 15.11 Mine Map Standards

It is extremely important for all mining operations in a given area to be tied into the same standardized coordinate system. This minimizes problems along boundaries and at mine connections. Additionally, this system must be tied into and made part of the state grid system. Therefore, the following minimum standards should be adhered to for mine maps:

When Exhibit 15.3: Operational Mine Maps are submitted, the minimum standards of the below listed items a) through f) will be adhered to.

- a) Minimum angular and coordinate ties for raw data would be an angular tie of less than 00°01'00" (1 minute) and a coordinate tie of less than 1:10,000 (1 foot in 10,000 feet) for any given closed loop survey.
- b) A closed loop survey is required to be at the next to last open crosscut of the mining section, but not more than 100 feet from the final face of a mining section.
- c) Elevation closure of +/- 1.0 foot per 5,000 feet.
- d) Vertical elevation shall be based on mean sea level (USGS elevation).
- e) Preferred datum is the Pennsylvania State Plan coordinate system (NAD83 Datum).

## 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> | <i>YES</i>                          | <i>NO</i>                           | <i>If Yes:</i> | <i>DRY</i>                          | <i>WET</i>                          |
|------------------------------------|-------------------------------------|-------------------------------------|----------------|-------------------------------------|-------------------------------------|
| 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. The remainder of the access road to the site will be surfaced with stone or paved and will be maintained in such condition. A broom attachment for the skid steer will be used regularly on the road. All reasonable actions specified in §123.1 (c) will be undertaken as needed to prevent fugitive dust from access roads, haul roads, and adjoining portions of the public road from crossing the property line. This will typically include a minimum of daily watering during dry weather, but other specified methods will be employed as needed. An operable water truck equipped with a pressurized spray bar and pressurized hose or nozzle connection will be kept on site for road watering at all times. 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. These requirements will be followed regardless of the size of the load or the size of the stone being transported. The watering and tarping requirements will also be included as a Special Condition in the Permit which will reference continued compliance with Compliance Order #241066 from 9/27/2024.

- c) Drilling operation.

Drills will be equipped with hoods and dust collection devices. In addition, 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).

All reasonable actions specified in §123.1 (c) will be undertaken as needed to prevent fugitive dust from crossing the property line. Lime stockpiles will be treated with water, when necessary, as an operable water truck equipped with a pressurized spray bar and pressurized hose or nozzle connection will be kept on site. Dampening the stockpiles prevents dust from blowing off. Inactive stockpiles shall be covered with tarps or other materials to minimize wind erosion and vehicular traffic on or around stockpiles shall be minimized. 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  $\mu$ 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.*

# Neiswonger Construction Inc.

Permit Application #03230101

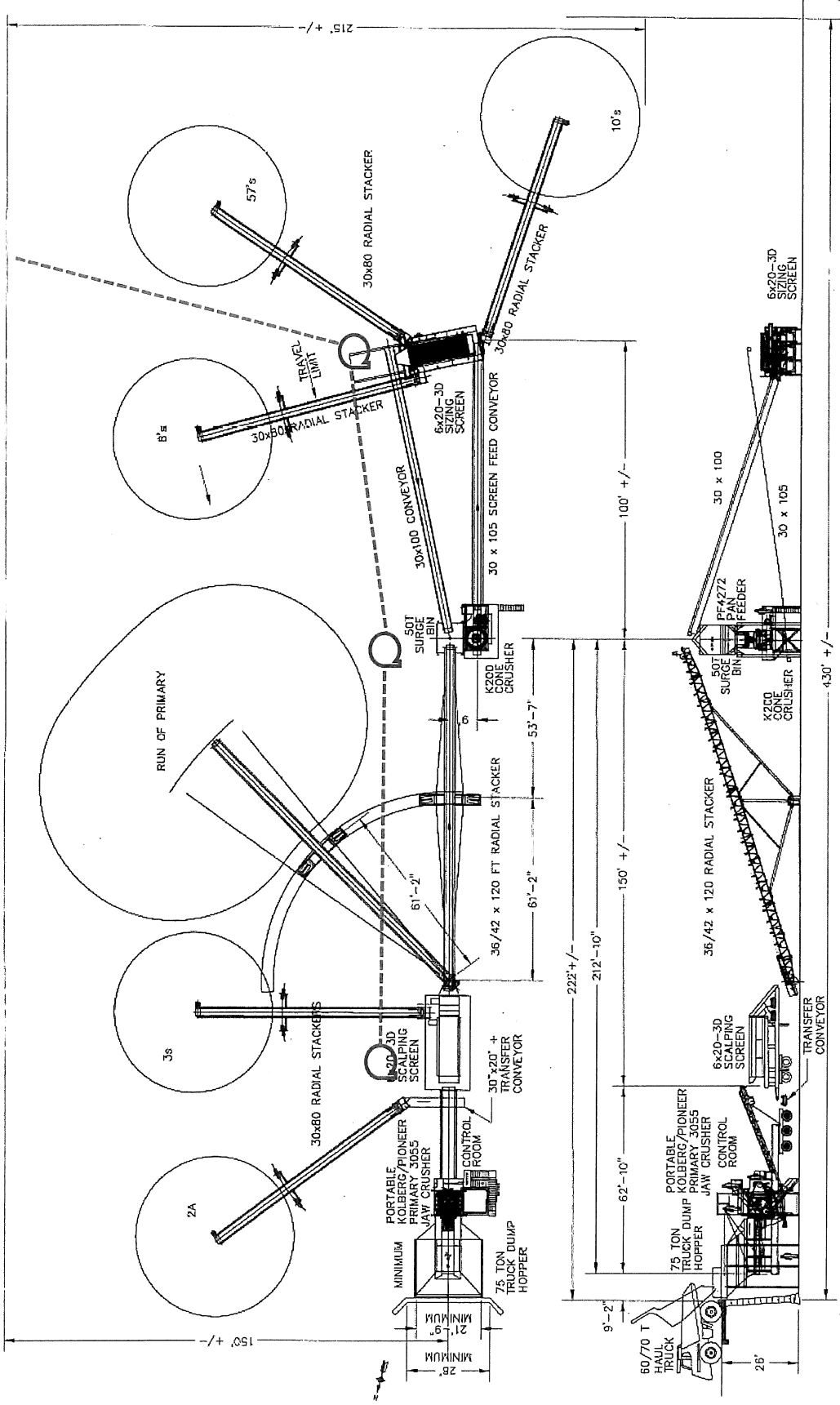
## Air Quality Monitoring Plan

July 2024, Revised December 2024

**Summary.** Enclosed is an air quality monitoring plan for the Maggie Lynn Quarry off of Pump Station Road off Morey Road (SR 2041) in Deemston Borough, Washington County. The current facility possesses a noncoal surface mining permit number SMP No. 63100401-07. The facility operates under NAICS Code No. 212319. All equipment associated with crushing operations operates by electricity from the electric grid year-round.

Air emission controls associated with the facility are under the regulation of Air Quality Permit File GP3-63-00970F issued on May 27, 2022. The emission controls are for the following equipment operating show on the drawing of the next page. This equipment is planned to be on site through the calendar year.

1. One (1) Primary Jaw Crusher, Model No. Pioneer 3055, manufactured by Astec, rated at 299 tph, and was installed in June 2021. Expected hours of operation are 2,000 hr/yr.
2. One (1) Cone Crusher, Model No. KPI-JCI Kodiak, manufactured by Astec, rated at 255 tph, and was installed in June 2021. Expected hours of operation are 2,000 hr/yr. The cone crusher feeds the following stackers:
  - a. North star Equipment 30' x 100' conveyor return feeds to the cone crusher. Capacity 51 tph
  - b. North star Equipment 30' x 80' stacker feeding #57. Capacity 106 tph.
  - c. North star Equipment 30' x 60' stacker feeding #8. Capacity 57 tph.
  - d. North star Equipment 30' x 80' stacker feeding #57. Capacity 43 tph.
3. One (1) Vibratory Screener, Model No JCI 6203-32LP, manufactured by Astic, rated at 410, and was installed in June 2021. Expected hours of operation are 2,000 hr/yr. This screener feeds three (3) separate radial stackers:
  - a. North Star Equipment 30' x 80' – feeding a 2A gravel pile. Capacity 99 tph
  - b. KPI-JCI 13-3680 Radial Stacker feeding AASHTO #3 pile Capacity 107 tph
  - c. MEI 42' x 120' radial stacker feeding the cone crusher. Capacity 204 tph.
4. One (1) Non-Vibratory Screen, Model No. Johnson Crusher, Manufactured by Astec, rated at 260 tph, and was installed in June 2021. Expected hours of operation are 2,000 hr/yr; and
5. Two (2) Conveyors, manufactured by North Star, rated at 51 tph, and were installed in June 2021. Expected hours of operation are 2,000 hr/yr.



Water Nozzle location 

Line From sump Pit Supply -----

# Maggie Lynn Crushing Operation Layout

Dust Suppression Nozzle Location Map

**Emission Restrictions – Prohibition of certain fugitive emissions.** Neiswonger Construction Inc. shall not permit the emission of fugitive air contaminants from a source into the outdoor atmosphere other than the following:

1. Construction or demolition of buildings or structures.
2. Grading, paving and maintenance of roads and streets.
3. Use of roads and streets. Emissions from material in or on trucks, and other vehicular equipment are not considered as emissions from use of roads and streets.
4. Clearing of land.
5. Stockpiling of materials.
6. Open burning operations (applies to clearing and grubbing wastes only).
7. Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.
8. Sources and classes of sources other than those identified above, for which the Neiswonger Construction Inc. has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements: *(Note: The Pennsylvania Department of Environmental Protection - Southwest Regional Office has not approved any sources that fall into this category to date.)*
  - a. The emissions are of minor significance with respect to causing air pollution; and
  - b. The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard

**Emission Restrictions – Fugitive particulate matter.** The Neiswonger Construction Inc. shall not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in the emission restrictions numbered one (1) through eight (8) above if such emissions are visible at the point the emissions pass outside the properties that are a part of the Maggie Lynn permit area. All reasonable actions shall be taken to prevent particulate matter from becoming airborne. These actions include, but are not limited to, the following:

- a. Application of asphalt, water or suitable chemicals on dirt roads, material stockpiles and other surfaces that may give rise to airborne dusts.

- b. Paving and maintenance of plant roadways
- c. Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosions by water, or other means.

**Emission Restrictions – Limitations.** Air emission controls associated with the facility are under the regulation of Air Quality Permit File GP3-63-00970F. A summary of potential emission by source is given as follows:

**Table:1**  
Processing Plant Potential Emissions

| Sources of Containments | PM Emissions         |                    |                  |
|-------------------------|----------------------|--------------------|------------------|
|                         | Un- Controlled (tpy) | Control Efficiency | Controlled (tpy) |
| Unpaved Roadways        | 27.21                | 50%                | 13.61            |
| Drop Operations         | 5.45                 | 50%                | 2.73             |
| Crushing                | 2.70                 | 50%                | 1.35             |
| Screening Activities    | 12.50                | 50%                | 6.25             |
| Total                   | 47.86                | 50%                | 23.93            |

1. The emission estimate is based on annual throughput of 500,000 tons of processed material.
2. Emission of drop operation, and hopper loading are calculated per AP-42 Section 13.2.4.
3. Emissions from unpaved roadways are calculated per AP-42. Table 13.2.2 using approximately 9,434 trucks per year entering and leaving facility yielding a daily VMT of approximately 0.56 miles per day.
4. Emission factors for crushing stone per 11.19.2-2.
5. A control efficiency of 50% is assumed due to availability of water sprays to determine PM emissions
6. Values may be slightly off due to rounding.

**Table:2**  
Processing Plant Potential Emissions

| Sources of Containments | PM-10 Emissions      |                    |                  |
|-------------------------|----------------------|--------------------|------------------|
|                         | Un- Controlled (tpy) | Control Efficiency | Controlled (tpy) |
| Unpaved Roadways        | 6.84                 | 50%                | 3.42             |
| Drop Operations         | 4.13                 | 50%                | 2.07             |
| Crushing                | 0.06                 | 50%                | 0.30             |
| Screening Activities    | 2.23                 | 50%                | 1.12             |
| <b>Total</b>            | <b>13.80</b>         | <b>50%</b>         | <b>6.91</b>      |

1. The emission estimate is based on annual throughput of 500,000 tons of processed material.
2. Emission of drop operation, and hopper loading are calculated per AP-42 Section 13.2.4.
3. Emissions from unpaved roadways are calculated per AP-42. Table 13.2.2 using approximately 9,434 trucks per year entering and leaving facility yielding a daily VMT of approximately 0.56 miles per day.
4. Emission factors for crushing stone per 11.19.2-2.
5. A control efficiency of 50% is assumed due to availability of water sprays to determine PM emissions
6. Values may be slightly off due to rounding.

**Total Controlled PM emissions = 23.93 tpy      Total Controlled PM-10 emissions = 6.91 tpy**

Fugitive air contaminants shall not at any time exceed emission limitations, which are based on visible fugitive emissions. Processing equipment (crushers, screens, belts, transfer points) must meet the standard of zero visible emissions. Use of roadways and stockpiling must meet the standard of taking all reasonable action as noted in PA Code §123.1 (c), to prevent visible dust from crossing the property line from these sources.

**Compliance.** Fugitive air contaminants from the nonmetallic mineral processing plant shall not at any time exceed the limitations specified in 25 PA Code §§123.1 and 123.2. Water spray dust suppression systems on portable nonmetallic mineral processing plants shall be operated on any and all occasions that the respective plant is operated. Operation without simultaneous operation of the water spray dust suppression system can take place only in those instances where processed materials contain sufficient moisture so as not to create air contaminant emissions on excess of the limitations of the standard of the General Permit. If, however, the water spray dust suppression system is incapable of operation due to weather conditions or other reason, the permittee may not operate the plant. A pressure gauge will be installed to indicate a normal operation of the dust suppression system. A water truck shall be utilized to prevent fugitive emission from becoming airborne onto any roadways or from materials stockpiling. The maximum speed limit on all mining roadway surfaces will be restricted to fifteen (15) miles per hour and will be strictly enforced. A five (5) miles per hour speed limit

must be followed when crossing the Equitable D-480 gas line, per the utility crossing agreement.

Dust from stockpiles will be reduced by minimizing the height of free fall of material and minimizing wind erosion of stockpile by locating stockpiles behind natural or manufactured windbreaks as noted by the applicant. An inactive stockpile shall be covered with tarps or other inexpensive materials minimizing wind erosion. Any vehicular traffic on or around the stockpile shall be minimized.

**Site Testing Requirements** - Upon the request of the Department, Neiswonger Construction Inc. shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance by the Department of tests on the source. The Department will set forth, in the request, the time period in which the facilities shall be provided, as well as the specifications for such facilities.

**Monitoring Requirements – Operation terms and conditions.** Based on requests of the department, visible emission may be documented as follows:

1. Neiswonger Construction Inc. shall conduct a daily inspection of the facility during daylight hours while the facility is operating to detect visible emissions, visible fugitive emissions, and malodors. Daily inspections are necessary to determine:
  - a. The presence of visible emissions.
  - b. The presence of visible fugitive emissions.
  - c. The presence of malodors beyond the boundaries of the facility.
2. All detected visible emissions, visible fugitive emissions, or malodors that have the potential to exceed applicable limits shall be documented and reported to the manager of the facility.
3. Neiswonger Construction Inc. shall submit all daily monitoring reports to the Bureau of Air Quality and to the District Mining Office on a monthly basis, with the previous month's daily reports due on or before Day 10 of the following month. This monthly report shall be submitted electronically in a tabular format in accordance with the format specified by the Department.
4. Neiswonger Construction Inc. shall report malfunctions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Malfunctions that are not resulting in, or potentially resulting in, air contaminant emissions in excess of an applicable air contaminant emission limitation and/or are not resulting in, or potentially resulting in,

noncompliance with any condition contained in this operating permit do not have to be reported. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

5. Any malfunction that poses an imminent danger to the public health, safety, welfare, or environment shall be reported by telephone to the Department and the County Emergency Management Agency immediately after the discovery of an incident. Neiswonger Construction Inc. shall submit a written report of instances of such malfunctions to the Department within three (3) business days of the telephone report. In notifying the Department, there will be a description of the following:
  - a. name and location of the facility;
  - b. nature and cause of the malfunction or breakdown;
  - c. time when the malfunction or breakdown was first observed;
  - d. expected duration of excess emissions;
  - e. estimated rate of emissions; and
  - f. corrective actions or preventative measures taken.
6. Neiswonger Construction Inc. shall notify the Department immediately when corrective measures have been accomplished:
7. Upon the request of the Department, the permittee shall submit a full written report to the Regional Air Program Manager within 15 days of the malfunction, excess emissions or deviation from the operation permit requirements.

**Reporting Requirements** – The following rules and record keeping will be kept at the Maggie Lynn mining site as follows:

Neiswonger Construction Inc. shall maintain, and make available upon request by the Department, such records, including computerized records, as maybe necessary to comply with 25 Pa. Code§135.3. These may include records of production, fuel usage, equipment maintenance or other information determined by the Department to be necessary for identification and quantification of air contaminant emissions.

The permittee shall maintain accurate and comprehensive records of the number of tons of stone loaded out from the facility each month. All such records shall be retained for at least 5 years and shall be made available to the Department upon request.

**Work Practice Requirements** - For any source specified in condition Emission restrictions (1) through (8), Neiswonger Construction Inc. shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
2. Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts Construction or demolition of buildings or structures.
3. Paving and maintenance of roadways.
4. Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

**Operating Terms and Conditions of the Maggie Lynn Operation.** The following are typical air quality permit conditions derived from 25 PA Code §§127.1 and 127.12. These are as follows:

1. The entrance road to the facility shall be paved for the first 300 feet.
2. All trucks entering or exiting the facility via a public roadway will have their truck beds completely tarped or otherwise covered unless empty. This requirement shall be posted in readily visible locations throughout the facility.
3. An operable water truck equipped with a pressurized spray bar and pressurized hose, or nozzle connection shall be always maintained on-site and shall be used as needed to control fugitive dust emissions from plant roadways, stockpile areas and the like.
4. Neiswonger Construction Inc. shall install permanent water spray bars with multiple water nozzles at every transfer point, screen, and crusher along the nonmetallic mineral processing plant. All permanent water spray bars shall be operated as necessary to keep all material processed adequately wetted for the facility to operate in accordance with 25 Pa Code §123.1.
5. Neiswonger Construction Inc. shall maintain all air contamination sources and air cleaning devices per manufacturer's specifications and good operating practices.
6. Neiswonger Construction Inc. shall operate the road sweeper and/or pressurized water truck throughout the day as needed to prevent fugitive emissions in accordance with 25 Pa Code §§ 123.1 and 123.2 and keep record of all operations of the road sweeper and/or pressurized water truck. (Sweeper and/or pressurized water truck should be run at the entrance to the Facility at the close of business.)