

VIA EMAIL

March 10, 2023

Neiswonger Construction, Inc. 17592 Route 322 Strattanville, PA 16258

Re: Large Noncoal Mine Application
Maggie Lynn Underground Mine
SMP Application No. 63192001
NPDES Permit Application No. PA0278360
Deemston Borough, Washington County

Dear Applicant:

In order to continue processing the above-referenced large underground noncoal permit application and associated National Pollutant Discharge Elimination System (NPDES) permit application, the following additions, corrections, and clarifications must be made. All regulatory references below are from Pennsylvania Code Title 25. Environmental Protection unless noted. The Department will provide a separate letter regarding enhanced public participation efforts to be conducted due to the project location adjacent to an Environmental Justice area, and to determine the applicant's role.

Module 1: LNC Permit Application General Information and PNDI/SHPO Response

NOTE: Use the most recent version of Module 1 on the Department's e-Library for replacement pages needed below.

- 1. Revise all exhibits and Module 1 Section C, Mining Area accordingly, to enlarge the permit boundary to include the length of the relocated UNT "E" to Tenmile Creek that was permitted under the existing SMP 63100401 and also the area on the adjacent Hawkins SMP 63813210 currently used by SMP 63100401 (shop, spoil areas, and roadway) as it is used by the applicant. (§77.104)
- 2. In Section C, Mining Area, please add a clarifying note as to the extent of the surface activity area. (§77.104)
- 3. In Section G, the applicant has indicated in No. 2 that there is an adopted municipal or multi-municipal comprehensive plan. Subsequently, the applicant indicates:
 - a. Per No. 4, the project does not meet zoning ordinance provisions or have zoning approval;
 - b. Per No. 5, the applicant has not submitted local municipal and county approval letters (nor evidence applicant attempted to obtain them); and,
 - c. Per No. 5, Concerns from local municipal and county approval letters have not been addressed (as noted the approval letters do not exist).

The applicant must send Municipal and County Land Use Letters to Deemston Borough and Washington County with project information on the Department's General Information Form (GIF) (0210-PM-PIO0001). Provide the letters and GIF, Certified Mail receipts, and any replies received to the Department. Update Section G accordingly. (Policy 012-0200-001) (§77.104)

- 4. For the Section I Affidavit, indicate which one of the three parenthetical descriptions of applicant authority apply. (§77.104)
- 5. The Pennsylvania Natural Diversity Index (PNDI-744670) and responses from jurisdictional agencies indicates the U.S. Fish and Wildlife Service (USFWS) deferred to the PA Department of Conservation and Natural Resources (PA DCNR) regarding plant species. Note a permit condition will be added to the permit regarding the PA DCNR Conservation Measure to avoid introduction of invasive species to protect the integrity of several plant species of concern. These include avoiding planting invasive species, using clean fill and mulch, and voluntary cleaning of equipment/vehicles. The PNDI must be valid at the time of issuance. Rerun the PNDI and update it per the comments below regarding the "Response to Questions Asked" section on Page 1-13, as the underground permit will encompass the existing quarry SMP, if issued. (§77.104, §77.126)
 - a. In Q1, that the entire project area plus a 300-foot buffer will occur in the locations stated. This response should say no as the existing Maggie Lynn permit is what caused the disturbances.
 - b. In Q2, the project (the entire surface impact area of the mining operation) does and has impacted forests. Therefore, this answer should be yes.
 - c. In Q3, forests of woodland area will be disturbed as a result of any part of the project should state yes.
 - d. In Q4, tree removal of more than 40 acres for all aspects of this project should be answered yes. It is estimated from the Exhibit 9 and historic aerial images that 40 acres of woodlands have already been disturbed prior to the addition of the Pit #3 area acreage. The current application is estimated to impact 48.5 acres.
- 6. Please provide the response from PA State Historic Preservation Office (PA SHPO) in response to the November 2018 GEI submittal for the underground permit.

Module 2: NPDES Information and NPDES Application (Comments below are for NPDES Application)

- 7. Please provide the NPDES application in its entirety on the most recent version in the Department's e-Library (currently 2/2022) and update based on the following comments. (§92a)
 - a. In Section A, No. 3, list the Associated Mining Permit No. or ID as 63192001 (pending).
 - b. Revise the total affected area in Section A No. 10 after Module 1 and exhibit comments are addressed to revise the permit boundary.
 - c. Provide the map date in Section A No. 13 as the date of the Exhibit 15.2 revision submitted with the response to these comments.

- d. In Section A, No. 11, per the NPDES application instructions, indicate the end date as the estimated year of completion of final reclamation. It is understood that long-term operations will be required to renew the permit every five years.
- e. Revise Section C, No. 21 in accordance with design changes to Sedimentation Pond P-1 requested in the Module 13 comments. It was noted that the average and design rates listed in the application are lower than those included in the Maggie Lynn Quarry (SMP 63100401) NPDES renewal application by an order of magnitude. The average and design rates for the Maggie Lynn Underground mine are expected to be higher than those of the Maggie Lynn Quarry and correlate to the pond design on the new design certifications to be submitted under Module 13.
- f. The flow diagram appears to be shown on Page 4, so it is unclear why Page 4 refers to Page 5. Revise as needed. Revise the average flow in accordance with design changes to Sedimentation Pond P-1 requested in the Module 13 comments and represent all collection ditches by name that will direct surface water flow to Pond P-1.
- g. The Section D No. 24 waiver option for COD, BOD, NH3 and TOC states that sewage wastewater is not present at the site, however the Office/Scale appears to produce wastewater. Revise this section to discuss how any wastewater is disposed, whether to holding tank, septic system or other. (If a septic system and leach lines are present, include actual outfall data for these parameters as the waiver will not be applicable).
- h. For Section D, provide actual data for existing Sedimentation Pond P-1. Update Nos. 24 and 27 in accordance with the latest results included in the current, inprocess renewal for SMP 63100401, Maggie Lynn Quarry, including conductivity data (which was blank). Also include the effluent characterization associated with the 001 sample collected 12/14/22 in No. 27. The Department will place a copy of the January 24, 2023 effluent characterization results from Geochemical Testing with the applicant's NPDES application materials. Although a new NPDES permit is requested, since Pond P-1 is existing, explain this in the text below Item No. 28. Also ensure that the boxes for total iron, total manganese, total aluminum, and sulfate are checked for Section D, No. 28. It is noted that these four parameters are present in the outfall already. Also, the metals are already limited in the current NPDES permit for SMP 63100401, can be associated with noncoal mining, and coal mining has also occurred in the area. Therefore, delete the current No. 28 text regarding the parameters not being applicable.
- i. The Department sent a February 2, 2023 letter to the applicant regarding the NPDES renewal for SMP 63100401 that discussed the effluent characterization results and the addition of total selenium limits to the permit. The first NPDES permit issued for the new underground permit will incorporate total selenium limits in accordance with the renewed NPDES permit for SMP 63100401.
- j. Please include the dates of signature in Section E, Certifications, No. 30 when resigned.
- k. Section F3 of the Preparedness, Prevention, and Contingency (PPC) Plan lists numerous 100-lb bags of soda ash under tarp in Section F3. Inventory. Since no treatment of P-1 is noted in Section 21, please indicate the purpose of the soda

- ash. Add ATF fluid (assumed to be automatic transmission fluid) to the Section F3 chemical inventory if stored. If flocculant use approval is obtained per Comment 7.p. below, add flocculent to Section F3, or remove the flocculant from the site.
- 1. Indicate on Page 8 that the F3 Inventory is provided on Page 11. Please put the entire inventory on Page 11 instead of split between Pages 8 and 11. Currently some of the information might be duplicated on both pages. For example, if the Off Road No. 2 Diesel Fuel on Page 11 is the Diesel Fuel listed on Page 8, indicate the 2,000 gallon fuel tank size on Page 11. Note that the "Manufacturer" column is not necessary on Page 11, but do indicate maximum quantities (or container numbers/sizes) on Page 11. (Also retain details from Page 8 for duplicate items on Page 11 and add type of tank). Exhibit 9 depicts two steel tanks. Revise to include the second tank and contents as needed.
- m. In Section F4, indicate the location and quantity of ATF fluid spilled and volume/type of material removed/disposed.
- n. On the Section F7 Emergency Contact List: 1) Add the PADEP Emergency Response Hotline 1-800-541-2050; 2) Delete "Knox, PA" under the New Stanton District Mining Office; 3) Correct the phone number for the Southwest Regional Office, as listed number is for the California District Office; 4) Revise the number given for the PA Fish and Boat Commission, (PFBC) as the number given is incorrect; indicate what office/department the new PFBC number represents or provide the 855-FISH-KIL (855-347-4545) number.
- o. On the Attachment to Section F7, please add the site name and 911 compliant address (from NPDES application Section A, 12) as a header. Also add notification of the New Stanton MCI in the event of a spill, leak, or release. For No. 7, indicate the full number for 855-FISH-KIL as 855-347-4545.
- p. Flocculant was observed on-site as a drip system for collection ditch (CD) CD-2 stored in a tank beside a lime fines stockpile and as a floc-log in CD-1. Flocculant is not currently approved for use on the existing Maggie Lynn Quarry permit and is not discussed in the application. Revise to include the use of flocculant and acquire PA Fish and Boat Commission (PFBC) approval, required due to aquatic toxicity concerns. If this is pursued, provide information to Daniel Ryan, PFBC Fisheries Biologist (814.359.5140; daniryan@pa.gov) regarding planned or potential usage of flocculant/gel logs under the Maggie Lynn Underground permit. PFBC requires a written site-specific plan to review how and where the flocculants will be applied. The submittal to PFBC must include the following.
 - i. Safety Data Sheets (SDSs) for each flocculant (or type of gel log) that will potentially be used.
 - ii. Location of each type of flocculant application and distance from the discharge. The flocculant application should be as far removed from the pond outlet as possible.
 - iii. Quantity of flocculant to be applied and demonstration to adherence to the manufacturer's recommendations.
 - iv. Provisions to prevent flocculant from being washed into waterways (i.e. applicant may propose to close pond outlet while flocculant is being dispensed, etc.).

Provide the Department with a copy of the approved flocculant usage plan, as well as the correspondence with/approval of PFBC, as an attachment to Section F of the NPDES application. Also update the PPC Plan to account for onsite storage and use, and discuss flocculant use in Modules 12 and 13 as needed. (§92a, 29 CFR 1910.1200(g))

Module 5: Property Interests/Right of Entry

- 8. Please address the following and provide Module 5 replacement pages as needed. The Module 5 instructions indicate each owner name listed must be **exactly** the same as the name identified on maps and other documents. These must be consistent with tax assessment maps. (§77.104, §77.162, §77.163)
 - a. John Kosky Contracting, Inc. and joint landowners John Alan and Stacy A. Kosky have different addresses (P.O. Box Nos.) on the Washington County parcel viewer. Please check and revise the Property 5 owner address in Module 5.
 - b. The property owner names for Property 31 and Property 10 are slightly different in Module 5 compared to the exhibits. Module 5 appears to be correct for Property 31 and the exhibits appear correct for Property 10. Verify and make the needed changes.
 - c. Please recheck mapping/ownership of parcels 10A and 10B. It appears incorrect parcels were selected when determining ownership so that both Module 5 and exhibits are incorrect. Revise.
 - d. Landowners appear to have changed/or additional owners are missing for the following Property Nos.: 6, 7, 8, 27, 30, 38, 44, 50. Please check and revise Module 5 and exhibits as needed.
 - e. Please check and revise first names or surnames of landowners for the following Property Nos. as needed in Module 5 and exhibits: 10, 19, 22.
 - f. Include correct addresses for contiguous landowners per §77.162. The address supplied on the online Washington County parcel viewer lists Clarksville rather than Fredericktown for the Property 23 address (addresses were included in Module 15).
- 9. Module 5.1 Note 3 indicates that Property 5 was not yet leased at the time of application submittal. The area of Property 5 (along with Properties 36 and 37) must be shaded to indicate "No Underground Mining" until the mineral lease is obtained. The portion of the surface activity area (haul road) that crosses Property 5 and the Morey Road access, cannot be permitted until the Contractual Consent of Landowner signed by both of the joint landowners is obtained. (§77.104, §77.163)
- 10. On the Washington County parcel viewer, Properties 1 and 4 both appear to be shown as Parcel ID No. 220-004-00-00-0034-00 with the parcel size as 106.7 acres. Property 3 is shown as Parcel ID 220-004-00-00-0034-02 with the parcel size as 71.5 acres. The copy of the Contractual Consent of Landowner provided as page 5-8 shows Property 3 as 75.1 acres instead of 71.5 acres. In addition, it lists Parcel No. 220-005-00-00-0024-00 (60.6 acres), which is Property 5, but the form is not signed by both Property 5 landowners. While the applicant has noted that a Contractual Consent of Landowner is forthcoming for Property 5, the copy provided on page 5-8 as invalid for the above reasons.

- Therefore, provide a replacement original Contractual Consent of Landowner for only Properties 1, 3, and 4 (John Kosky Contracting, Inc.) separately from that for Property 5 (John Alan and Stacy A. Kosky). (§77.104, §77.163)
- 11. Per §77.121(c), the applicant is to notify each property owner within the proposed permit area, by registered mail, of the proposed permit, with the exception of surface landowners who have a completed Consent of Landowner form submitted with the application. Please indicate whether this was done for Properties 36 and 37 and provide copies of the letter sent and mail receipts. (§77.104, §77.121)

Module 6: Checklist and Exhibits 6.1 and 6.2 Environmental Resources Maps

- 12. Per Module 1 comments, Exhibit 6.1 and all exhibits must be revised to reconfigure the permit boundary to include the length of the relocated UNT "E" to Tenmile Creek permitted under SMP 63100401 and to include the area used on the Hawkins SMP (shop area, and access road). Per the Module 15.4 instructions, also depict the 1,000-foot perimeter and date the exhibit. Also, please place the NPDES discharge point on the exhibit per the Module 6 instructions. Add the locations of the Clyde Mine Pool measuring points on the Hawkins permit and the specific location of the Clyde Mine Pool Treatment System pumping well(s) and observation well(s) where elevation is measured. Add the two Y-series boreholes not shown on Exhibit 6.2 if applicable per Exhibit 6.2 comments below. (§77.104, §77.410)
- 13. Please review the following comments on Exhibit 6.2 and revise and resubmit. (§77.104, §77.410, §77.452, §77.454, §77.456, §77.459).
 - a. Per the Exhibit 6.2 checklist and §77.410, ensure that in addition to the Professional Geologist, either a Professional Engineer or Professional Land Surveyor seals the revised exhibit.
 - b. Please place the latitude and longitude in the four corners of the exhibit in addition to the northings/eastings reference grid already included.
 - c. The stream relocation of UNT "E" must be shown completely within the proposed permit boundary. This includes the 100-foot riparian area (10.2 acres total) that was to be planted with the woody species specified on Exhibit 14.1.E.3. In addition, unless Stage 2 bond release was achieved for this area, reclamation bond must also remain in place for this area (see Module 10.15 comments).
 - d. There are several areas depicted on the exhibit within the existing Hawkins permit that are utilized to support the existing Maggie Lynn Quarry (SMP 63100401) and would be expected to support the proposed Maggie Lynn underground permit. These include the shop, the road accessing it, the surrounding storage area, the spoil storage area adjacent to the shop and the spoil storage piles between the scale house and wetlands A, B, C, D. Please include these areas within the surface permit and bonded area of the new Maggie Lynn Underground permit boundary (see Module 10.15 comments).
 - e. The wetland depicted adjacent to Properties 6/7 is an unmaintained sediment/ treatment pond for the existing Hawkins permit. Please revise to label as such and depict the piped spillway that is present.

- f. There is existing ditching and piping beginning near shop area of the Hawkins permit and extending towards the sediment pond near Properties 6/7. Show this existing ditching on the exhibits and ensure that the water handling plan of the proposed permit accounts for its presence.
- g. Label the existing pond on the Hawkins Permit near Pump Station Road as a Sub-F pond.
- h. An unmarked, white standpipe is located in the area of DH-5. Show this on the exhibit and label as to its use.
- i. Depict and label existing structures listed in Module 10.3.
- j. Ensure any changes made to Module 5 landowners per above comments are also made on the exhibit.
- k. Add the formation contact line between the top of the Benwood Limestone and overlying strata.
- 1. Confirm the proper location of Outfall 001 as it is depicted in different locations between the Exhibit 6.2 and Exhibit 9 and revise everywhere necessary. Please add 001 to the list of monitoring points (MPs), indicating it as an outfall from Sedimentation Pond P-1.
- m. In the MP table list, elaborate on the spring descriptions in a similar manner to the 8.1(A) sample descriptions for Springs 26, 27, and 73.
- n. Revise location descriptions of flow MPs to use the UNT E branches shown on the exhibit. (See relevant Module 8 Comment 29 below).
- o. Please place a note at the bottom of the flow MP chart to indicate that MPs 14, 15, 17, and 21 are also monthly flow MPs, in addition to quarterly sampling points.
- p. Module 7.1b describes a private well found via Pennsylvania Groundwater information System (PAGWIS) that appears to be on Property 15. If so, add this well as a background sampling point or monitoring point on Property 15 (Ondrick, mis-identified as Orick in Module 7.1b and PAGWIS). The Property 15 building is indicated as unoccupied, but may be an occupied building or residence since the well was installed; revise or clarify.
- q. Clarify water supply information for occupied buildings on Properties 10, 11, 15, and 16 north of the permit. For Properties 10 and 16, neither "public" to indicate the building is supplied by public water, nor a private water supply is shown; For Property 11, it appears "public" should be indicated in addition to the cistern. As indicated above, a well appears to be missing from Property 15 and the building might therefore be occupied; revise to occupied building if applicable. (Add additional water supplies to Module 8 as applicable.)
- r. Add culvert, with size and type, and show how UNT G crosses under SR 2024 from background sampling point 40.
- s. The legend indicates the pale yellow with red outline shading as a "Restricted Mining Zone". Label/distinguish each as "No Surface Mining", "No Underground Mining" or both, or otherwise elaborate on restriction. Include Properties 5, 36 and 37 as "No Underground Mining" until leases are obtained. Also include "No Underground Mining" below SR2041 and its right of way until PennDOT approval to mine beneath it is obtained.
- t. Include a 300-ft "No Surface Mining" barrier or provide occupied building barrier for the occupied building on Property 5 as it is within 300 feet of the haul road.

- u. Revise Mine Summary Chart as needed per Module 7.4 comments below. Please advise how the operations listed as Mine Key numbers VI differs from C, and VII differs from B and whether either or both sets should be combined. The permit number for the Nardei Contracting Co., Inc. operation differs from that in Module 7.4; please revise either the exhibit table or module table.
- v. The legend includes a symbol for deep mine portals/deep mine (country bank) areas. Please bold the portal symbols on the exhibit to match the legend symbol so they are more evident.
- w. Show/label the apparent well located south of the Scale/Office (vicinity of H-BH-2). In addition, depict water/sewer lines to/from the office if present, and indicate whether septic system or holding tank is present. If water well is present on site, provide samples, incorporate into Module 8, and depict and include it as a monitoring point.
- x. Add the township road number for Pump Station Road.
- y. The property line between several properties (e.g. between Property Nos. 3 and 41; 8 and 53; 42 and 43; 45 and 51) cannot be distinguished on the hard copy. Please check and revise so it is visible.
- z. Since Properties 51, 52, and 53 are in Greene County, please expand Map Note 2 to indicate how ownership was determined.
- aa. Expand Map Note 3 to include determination of sample point elevations.
- bb. Per 6.2e) label buildings as to owners, occupants, and current use.
- cc. Please add a note to the test hole information table to indicate that the locations of drill hole 3523 and Thompson Shaft are depicted on the Exhibit 6.1. Add map note to explain why Y-4 and Y-5 are missing from sequence, if true or show them on the 6.1 if applicable and provide boring logs in Module 7.
- dd. At the bottom of the appropriate test hole information tables, identify abbreviations used in the table above (Wbg, (TS), (BS), SEW (or eliminate this abbreviation), WbgA, Wbgr, LWbg, and B.O.V.)
- ee. If the Belle Vernon anticline is within 600 feet of the permit boundary as stated in Module 7.2, please depict the axis within the 1,000-foot offset area on the exhibit and include the anticline symbol in the legend.
- ff. Add the "DW" designation for dug well to the legend as a sample type to cover point 76.
- gg. Many samples are designated as S to designate a spring (at minimum background samples 20, 22, Bugger 25, I, 34, 36, 38, 39, 44-50, 53, 59, 60, 62, 69, 71, and monitoring points 15 (flow only), 24, 26, 27, and 73). Depict these spring origins using the spring symbol in the legend.
- hh. See Comment 30 and 32.e and revise MP H and MPs 14 and 15 depictions on the exhibit if necessary.
- ii. It appears the "MD-F" monitoring point should utilize the DM designation (rather than D). Check and revise as needed.
- jj. Please list the "S', "T", "P", and "SE" designations for the ten flow only sample points as well as the sample points, to indicate type of flow monitoring point.
- kk. MW-1 is depicted only as a test hole. Depict as a background groundwater sample as groundwater data from MW-1 is present in Module 8. It is understood that it was buried and is now inaccessible this can be noted on the exhibit if desired.

- ll. MW-TH-6 was included as a monitoring point in the pre-application and was removed from the monitoring program. Depict it as a monitoring point on the exhibit and the MP list. It is understood that MW-TH-6 will be mined through at some point, but can be used while available.
- mm. If UNTs "B" and "H" to Tenmile Creek are ephemeral, label as such (similarly to labels on Ephemeral UNT "C" and Ephemeral UNT "F" (to UNT D).
- nn. On the Flow Monitoring Chart, correct the elevation for Flow Monitoring Point B.
- oo. Per the PNDI and pending SMP 63100401 revision, update the exhibit to remove the "no surface mining" areas due to the absence of Running Buffalo Clover and Tall Larkspur, as well as the related legend symbol map note. Instead, add a new map note to the exhibits to indicate that the PA DCNR Conservation Measure listed in the PNDI will be followed to protect plant species of special concern. However, if the updated PNDI requested under Module 1 comments contains different information, respond as needed and depict areas of concern on map if needed.
- pp. Update wetland information and labels per Module 14 comments.
- qq. Background sample point 37 is designated as WL to indicate a wetland sample, however no wetland is shown in this area. Depict the wetland boundary.
- rr. Add solid and dashed road designations to the legend.
- ss. Indicate a 100-foot no underground mining barrier from the right-of-way lines for all state roadways (SR 2024 Buckingham Road and SR 2041 Morey Road) until approval from PennDOT is secured.
- tt. Revise the legend to include line style for overhead electric line depicted crossing the Clyde Holdings, Inc. property and proceeding over the highwall to the pit floor. Also include utility pole symbol in legend. Include the utility owner and depict the right-of-way width for this electric line on the exhibit.
- uu. Add the diameters of the Kreibel Gasline and the offshoot of the Peoples Gasline along Leonard Road.
- vv. Please delete oil and gas wells that are more than 125 feet from the <u>final</u> permit boundary as currently some are shown and some are not.
- ww. On eMapPA, four Farmline Map gas wells (two abandoned) are shown within the underground mining boundary but not on the exhibit. Depict these wells and the 125-foot barrier.
- xx. On eMapPA, three historic oil or gas wells are shown within the underground mining boundary but not on the exhibit. Depict these wells and the 125-foot barrier
- yy. The abandoned gas well shown in the northwest permit area on the exhibit does not appear on eMapPA. Please provide information on whether this well was field located; If not, locate in the field and adjust location if needed.
- zz. There is a walking trail with culverts located between Tenmile Creek and Pond P-1. Show the parking lot/trail on the exhibits and include the culverts that are present.

Module 7: Geology Information

14. Please add a regional stratigraphic column that includes the Pittsburgh Formation as an Attachment to Module 7.1a) and reference its source, and reference in the Module 7.1b)

- Introduction narrative. Provide electronic copies of this column and also the regional geologic structure maps, which appear to have been omitted from the e-copy. (§77.104, §77.403, §77.404)
- 15. In the first, third, and eight paragraphs of the Module 7.1b) Geologic Logs portion of the narrative, please identify all the drill holes being discussed as they are introduced, as was done in most other cases. Also, indicate that Thompson Shaft and 3523 locations are shown on Exhibit 6.1, while the other drill hole locations are on the proposed underground mine exhibits. Address whether Y-4 and Y-5 were drilled and if so provide boring logs and show on Exhibit 6.1 if needed. Include statements for all drill hole series discussed as to whether/how/when they were plugged or grouted and which are still open/bonded. (§77.104, §77.403, §77.404)
- 16. For any open drill holes, discuss what purpose they serve now and in the future. It appears from a field review that DH-5 and H-BH-2 may not have been permanently sealed. Revise the exhibit drill hole tables to indicate if holes are cased, remain open for use, are plugged, etc. Provide bond for sealing any unsealed holes (see Module 10.15 comments). (§77.104, §77.503)
- 17. The water conditions column was left blank for the TH-series boreholes located within the underground mining area so water conditions during drilling were not recorded, although static water levels were provided. Revise the TH-series logs to complete the water conditions column throughout their depths and identify any water inflows. (§77.104, §77.403, §77.405
- 18. In the Module 7.1b) narrative, discuss and include the boring log and well construction diagram for well MW-1, as background groundwater data is provided for it. Reiterate when it was inadvertently buried and therefore is now inaccessible. Discuss the MW-TH-6 well and provide a well construction diagram to illustrate well completion. (§77.104, §77.403, §77.404)
- 19. The 7.1b) narrative eight paragraph at the top of Page 7-2 states the four boreholes were drilled on the Hawkins SMP 63813210 and a drill log was provided for one of them. Please provide all four drill logs. (§77.104, §77.403, §77.404)
- 20. The well at 277 Buckingham Road described in the ninth paragraph of Module 7.1b) on Page 7-2 should be identified as the Ondrick private well, located on Property 15. Please revise the narrative to explain. (PAGWIS mis-identified owner's surname). Revise the well log to indicate it has an 8" casing installed to 20 feet below ground surface (bgs). (§77.104, §77.403, §77.404)
- 21. An 11 x 17 of the Clyde Mine was provided as an attachment to Module 7. Please reference it in the narrative and discuss. (§77.104, §77.403, §77.404)
- 22. Several reports of unconfined compression tests were included as an attachment to Module 7, on pages 7.1.106 through 7.1.129, but were not referenced nor discussed in this module. These, and additional results are presented and discussed in Module 15,

however Module 15 did not include the Geotech Engineering, Inc. (GEI) pictures of failure surfaces on pages 7-1.107, 7-1.109, etc. It is suggested the applicant remove the compression test results from Module 7, include the missing photos in Module 15, and use Module 7 to reference Module 15 instead of duplicating the discussion and results. Also, discuss fractures, laminations, and the RQD of various strata in cored drill holes in Module 15. (§77.104, §77.403, §77.404)

- 23. Provide the key for the regional geologic map provided on page 7-9 as an Attachment to Module 7.2. (§77.104, §77.403, §77.404)
- 24. Please check the following and revise the table in Module 7.4 as needed. (§77.104, §77.410 (a)(13))
 - a. Please split the table into surface mines and underground mines. Please place the operation name in parentheses beneath the Operator, as was done for the Clyde Mine.
 - b. Correct the typographical error in the permit number for the Huffman Strip (Map Key VA) (63823036).
 - c. Please advise how the operation listed as Mine Key numbers VI differs from C, and whether these should be combined. The exhibits appear to list the Bushta mine as both VII and B, while no B is given in the Module 7.4 table. Revise.
 - d. Add the abandoned Mon Valley Steel Co, Inc. refuse disposal facility (Permit 63743703), shown east of the permit area on eMapPA.
 - e. Indicate the status of Mine Key A as abandoned rather than completed.
 - f. In addition to revising the Module 7.4 table, update the Mine Summary Charts on Exhibits 6.2, 9, 15.2, 16.17, and 18 as needed.
- 25. Revise Geologic Cross-sections A-B and C-D to depict/label the zones of perched water, upper limit of zone of saturation (label as phreatic or water table surface), and the maximum Clyde Mine Pool elevation (label as Clyde Mine Pool maximum potentiometric surface) possible upon pumping cessation. (Module 15 states the maximum elevation of the Clyde Mine Pool would be 805 feet mean sea level (ft msl) if pumping ceased, and data provided at the end of Module 8 already showed recent elevations of 802.15 ft msl.) For projected boreholes, add the distance they were projected to the cross-section line. Indicate groundwater flow directions on Cross-section C-D; this can be done using notes if flow directions are oblique to the page. (§77.104, §77.403, §77.404, §77.410)
- 26. In the Module 7.1c) narrative regarding geologic cross-sections, discuss any corrections/modifications made as a result of projecting distant geologic/mining information. (§77.104, §77.403, §77.404, §77.410)

Module 8: Hydrology

27. Several flow monitoring points (MPs) are included as well as sample collection MPs that will also monitor flow. Please describe methods by which flow is being measured on page 8-2. Please discuss what reliable local precipitation data will be available to

- correlate with flow data when needed or consider establishing a precipitation measurement station for daily recording of precipitation. (§77.104, §77.457, §77.532)
- 28. Revise Module 8.2b) to reinstate MW-TH-6 as a monthly monitoring point for groundwater elevation only. This well was included as an MP in the pre-application, then removed in the application in favor of monitoring springs. Until MW-TH-6 is mined through, it should be used as a MP and to record groundwater elevation data. If a water well is present onsite (vicinity of H-BH-2 or elsewhere), please sample, incorporate as a private water supply in Module 8, and add this well to the monitoring program. (§77.104, §77.457, §77.532)
- 29. The location descriptions of several flow MPs (exceptions being MPs A, 17, 21) do not reflect the Exhibit 6.2 labels being used for the UNT "E" branches, as the UNT labeling appears to have changed from the Maggie Lynn Quarry SMP. On Exhibit 6.2:
 - a. MP B monitors UNT "E" below the confluence of the UNT "E" South Branch with UNT "E";
 - b. MP C monitors UNT "E" below the UNT "E" North Branch and above the UNT "E" South Branch;
 - c. MP D monitors UNT "E" South Branch;
 - d. MP E and MP F flow measuring locations respectively monitor the UNT "E" North Branch and UNT "E" upstream of the confluence with the UNT "E" North Branch;
 - e. Flow MP G monitors UNT "E" South Branch downstream of MP 5 and upstream of flow MP D; and,
 - f. MP H monitors UNT "E" South Branch downstream of MP 5 and upstream of flow MP G.

Please revise the Exhibit 6.2 flow MP table and future 8.1(A) forms to be consistent with the labels used for the UNT E branches on the exhibit. Also mention "measured at x-inch (or x") PVC pipe outlet" in descriptions for all flow MPs on flow MP exhibit table and future 8.1(A) forms. (§77.104, §77.457, §77.532)

- 30. Please discuss whether MP 14 is collected in the middle of the wetland as shown, or adjust the location on Exhibit 6.2 to depict actual collection point. The Exhibit 6.2 shows that the MP 15 spring is sampled from a 4" PVC pipe, depict on the exhibit, similar to other points sampled from pipes. Slight coordinate adjustments may be needed for MPs 14 and 15. (§77.104, §77.457, §77.532)
- 31. Contact landowner Ondrick to add information on the Ondrick private water supply well (mis-identified as Orick well in PAGWIS) to Form 8.2(A)(8), and likewise provide information on the apparent water well south of the Scale/Office if it is an on-site water supply. Revise appropriate sections of Module 8 (e.g. 8.3a) third and last paragraphs and other mentions), as well as Module 8.7 to incorporate this private well). The PAGWIS log shows that an 8" PVC casing was installed to 20 feet bgs with the well open hole from 20 feet to 97.5 feet bgs. Please add the parcel numbers for all private water supplies to Form 8.2(A)(8). (§77.104, §77.532)

- 32. Please provide updated Module 8.1(A) Forms with data collected since the permit application was submitted in December 2021, revising the Form 8.1(A)s per the following comments. Please submit electronic spreadsheets as well as the pdfs. Electronic spreadsheets should include all historical data from the Maggie Lynn Quarry. This background/historical data will continue to be relevant as the underground permit is desired to replace the surface quarry permit. Some comments below pertain to the future electronic spreadsheets. (§77.104, §77.403, §77.406, §77.457, §77.532)
 - a. Revise the relevant location descriptions and add culvert detail to match UNT labeling on Exhibit 6.2 per Comment 29.
 - b. MP 1 date of 10/18/18 and flow MP E date of 11/21/12 appear to be typographical errors; revise dates to 10/18/17 and 11/21/21, respectively, as appropriate.
 - c. MP 11 (4) appears to be a duplicate of MP 11 (3) on electronic submittal; if so, delete extra page.
 - d. Coordinate adjustments may be needed for MPs 14 and 15 per Comment 30.
 - e. Revise MP H elevation, which does not match Exhibit 6.2 flow MP chart or contours. Coordinate adjustments for MP H are also needed.
 - f. For MPs 5 and 14, annotate the 8.1(A)s to add "Quarterly Monitoring & Monthly Flow", similar to the notation for MP C.
 - g. Revise the sample description for MP-2 to add "same as sample point 43, south-central boundary of permit" in a similar manner to how the 8.1(A) for 43 indicates "same as sample point MP-2" and use same relative location.
 - h. Ensure column widths are adequate to display MP 15 results and others if needed (MP 15 indicated #### for acidity on some 2019 sampling rounds in pdf file).
 - i. Include an 8.1(A) for a new private water supply well on the Ondrick Property 15 and include total aluminum as a sampled parameter. Please provide one additional sample for wells 35 and 58, to include total aluminum.
 - j. For private water supply wells and springs, indicate whether each reported sample result is before or after treatment.
 - k. Sample point number 76 is indicated for the Simpson dug well on Form 8.2(A)(8), however no 8.1(A) is provided. Since 76 is indicated and shown on Exhibit 6.2, please provide an explanatory 8.1(A) form.
- 33. In the Module 8.3a) 3rd paragraph, please note that water sample 34 is a private water supply spring and 55 is a seep. (§77.104, §77.403, §77.405, §77.457, §77.532)
- 34. In the Module 8.3a) 5th paragraph, please note that water samples 5, 6, 7, and 8 are small underground mine discharges, 21 is a seep and 72 is a Waynesburg deep mine discharge. (§77.104, §77.403, §77.405, §77.457, §77.532)
- 35. Revise the 3rd paragraph of Module 8.3a) to explain the term "low volume water bearing zone", and to include groundwater presence in Boreholes B-1 and B-2 and the TH-series boreholes located within the underground mining area. Discuss what the static water levels obtained in the TH-series boreholes represent in consideration of the open hole extent. (§77.104, §77.403, §77.405)

- 36. Revise the Module 8.3a) 6th paragraph, to discuss the quality of groundwater in boreholes compared to Springs 26 and 27 and the source of the elevated total iron and total aluminum in these springs. Explain, if these springs emanate from the Benwood Limestone, the process of how they appear to have been impacted by mining on the Waynesburg Coal seam. (§77.104, §77.403, §77.405)
- 37. In the Module 8.3a) 9th paragraph, acknowledge the Ondrick well by water sample number that is assigned to it. (§77.104, §77.403, §77.405, §77.457, §77.532)
- 38. Update the Module 8.3a) narrative to describe which units serve as confining layers, whether the Benwood Limestone is a water table or a confined aquifer, and identify the first aquifer below the Benwood Limestone (lowest mineral to be mined) and its current use and potential future use. Discuss confined/unconfined aquifers below the unit to be mined. (§77.104, §77.403, §77.405, §77.457, §77.532)
- 39. In Module 8.3b), describe the presence of fractures/fracture zones, and how they influence the various groundwater flow regimes. (§77.104, §77.403, §77.405, §77.457, §77.532)
- 40. Module 8.3c) second paragraph provides two elevations of the Clyde Mine Pool collected in March 2018 (757.7 ft msl and 758.15 ft msl). Acknowledge and explain data for the Clyde Mine Pool elevation provided at the end of Module 8 that included a maximum elevation significantly higher (802.15 ft msl) and also provide and consider more recent data. Revise the narrative to incorporate this data, the maximum Clyde Mine Pool elevation if pumping at the Clyde Mine Pool treatment facility ceased, and if true, indicate the Pittsburgh Coal mine void acts as a confined aquifer such that these are potentiometric elevations. (§77.104, §77.403, §77.405, §77.457, §77.532)
- 41. Incorporate the quality of Wetland discharge 25 and Springs 26 and 27 into the Module 8.3 c) discussion, as these sampling points exhibit elevated total iron and total aluminum; discuss source of elevated metals and sulfate. (§77.104, §77.403, §77.405, §77.457, §77.532).
- 42. Review/revise the Module 8.3c) 8.4b) ranges/concentrations given in narrative to ensure they are consistent with current/additional background data supplied for the underground application; some minor inconsistencies were noted. Please summarize only the data provided with the application. Please indicate pH ranges given are for field pH. In addition, please revise as follows. (§77.104, §77.403, §77.405, §77.457, §77.532)
 - a. Module 8.3c) 10th paragraph, note flow rate ranges of deep mine discharge 72.
 - b. Module 8.4b) 5th paragraph, note flow rate ranges of Subchapter F point MD-F.
 - c. Module 8.4b) 7th paragraph, describe whether sample point appears to be impacted.
 - d. Module 8.4b) 9th paragraph, for the UNT ephemeral F to UNT D, indicate applicable sample point (12), which had two samples included with the application to date.
 - e. Module 8.4b) 10th, 11th, 12th paras., describe sample point 5 and 23 as being located on UNT E, South Branch, and sample points 17 and 18 as being located on UNT E, to be consistent with the exhibit labeling.

- f. Module 8.4b) 6th, 15th, 16th paras., state "undetectable" aluminum or manganese or provide the "<"value, rather than "no" aluminum or manganese for description of sample points 2 and 30; Also sample point 41 did have a manganese detection to note in data submitted with application.
- g. It is suggested that the discussion of UNTs to UNT G be grouped with the UNT G discussion (i.e. move paras. 21 through 24 ahead of the paragraph describing UNT Ephemeral A to Black Dog Hollow.)
- 43. Add a sentence to the Module 8.5 narrative to indicate there are no other public water supplies within ten miles downstream of the site, if true. (§77.104, §77.410)
- 44. Revise the narrative in Modules 8.6a) and b) to discuss hydrologic impacts of the Clyde Mine to the proposed operation and of the operation to the Clyde Mine Pool. Include in discussion: 1) Whether interburden thickness between bottom of Benwood Limestone and the Clyde Mine varies across underground mining area and/or fractures are present; 2) Locations and continued availability of Clyde Mine Pool elevation measuring points and which will be used for monitoring throughout the proposed operation; 3) Maximum Clyde Mine Pool elevation recorded which was 802.15 ft msl based on the data provided at the end of Module 8 (unless superseded by more recent data to be provided) and maximum elevation if pumping ceased; 4) Comparison of Clyde Mine Pool and Pittsburgh Coal elevations and discuss Pittsburgh Coal/Clyde Mine void acting as a confined aquifer, with elevations representing the potentiometric surface. Discuss whether mining activities could cause upwelling. (§77.104, §77.452, §77.457)
- 45. Revise the Module 8.6a) narrative to describe, from beginning stages to maximum depth and lateral development, the proximity of the proposed underground mining operation to the regional water table and how groundwater in this saturated zone will be intercepted by the operation (address depth of mining relative to the true water table). Discuss expectations when mining below intact Waynesburg Coal, which supports a perched water table. Explain whether flows or quality of Benwood Limestone Springs 26, 27, and 73 are expected to change and how as mining progresses, with respect to the elevated total iron, total aluminum, and sulfate currently present in Springs 26 and 27. (§77.104, §77.452, §77.457)
- 46. Revise the Module 8.6b) narrative to elaborate upon what evidence or references the applicant is using to support the statement that limited groundwater is anticipated to be encountered within the proposed mining of the Benwood Limestone. Additional information/yield of MW-TH-6 could be presented, for example. (§77.104, §77.452, §77.457)
- 47. Revise the Module 8.6b) narrative to discuss whether impacts to surface water features will occur from underground mining, or whether no impact is expected and why (e.g. discuss overburden thickness and quality (RQDs), fracture occurrence, etc.). Discuss whether any impact to downgradient Wetland E is expected. Also discuss inconsistent gain/loss of stream flow noted between flow monitoring points G and D on UNT E, South Branch, and loss of flow between monitoring points A and 42 on the UNT E

- mainstem, although it is noted these are outside the underground mining area. (§77.104, §77.452, §77.457)
- 48. Module 8.6c) has checked "No" in response to the question of whether pumping of groundwater is planned within the life of the operation. This is not consistent with Module 15 which states that all water generated by the mine will be pumped or directed to Sedimentation Pond P-1 for settling and discharge. Check "Yes" instead of "No" and provide the requested information regarding estimated gallons per day for each stage of mining. Explain whether flows of downdip Benwood Limestone Springs 26, 27, and 73 are expected to increase or decrease as mining progresses. Note that Module 10.1 comments refer to typical estimates of 0.5 to 1 gpm per acre for mine water from underground mines. (§77.104, §77.452, §77.457)
- 49. Please update Module 8.7 to include the Ondrick private water supply well, the possible water well south of the Scale/Office, or other supplies added per Comments 13.p,q,w. Update the narrative to express reasons for the beliefs expressed that private Well 35 is shallow and private Well 58 is an intermediate depth (this may have been included in preapplication response letter but not the narrative). Include additional water supplies as needed per Exhibit 6.2 comments (Potential properties with occupied buildings where water supply was not clarified on exhibit). (§77.104, §77.532)
- 50. Several pages of Clyde Mine Elevations were provided on pages 8-16.1 through 8-16.17. Please clarify/revise as needed per the following comments. (§77.104, §77.457, §77.532)
 - a. Indicate (perhaps in a cover page) that these data represent the depth to, and elevation of, the Clyde Mine Pool at the Clyde Mine Treatment Plant shown on Exhibit 6.1 (if correct), and indicate: 1) Owner/operator of Clyde Mine Treatment Plant and data provider; 2) Description of measurement collection point; 3) Surveyed elevation and location coordinates of the measuring point; 4) Indicate whether this will be the point monitored throughout the proposed operation and that it will be continually available, since monitoring will be required to continue. (It was also noted in the application that there is a measuring point on the adjacent Hawkins SMP 63813210.)
 - b. Depict the measuring point on Exhibit 6.2 or Exhibit 6.1 (or confirm the measurement point is at the Clyde Mine Treatment Plant shown on Exhibit 6.1).
 - c. Explain the 38-foot rise in elevation shown between 9/30/18 and 10/1/18.
 - d. Page 8-16.1 is titled Clyde Elevations 2016 but 2017 data is shown. Revise.
 - e. Page 8-16.17 is a repeat of page 8-16.6 instead of the final days of 2018. Replace with remainder of November and December 2018 data. Provide updated data with response to comments.

Module 9: Checklist and Exhibit 9 Operations Map

- 51. Please revise Exhibit 9 as follows and resubmit. (§77.104, §77.410, §77.454)
 - a. Review the Exhibit 6.2 comments, many of which will also be applicable to Exhibit 9; please ensure all applicable revisions are also made to the Exhibit 9.
 - b. Label Pit 1 area and Pit 2 area as "Existing Pit #1 Area" and "Existing Pit #2 Area". Revisit portals depicted and numbering and ensure it matches the Module

- 10 narrative, which is to be revised to indicate portals by number and split out the Pit #3 area. The narrative also describes up to six portals to be installed in Existing Pit Area #1 (second paragraph under Underground Mining Area section, page 10-2). If this is the case, all six are to be shown and numbered on the exhibit.
- c. Label the area of currently shown Portals 5, 6, and 7 as "Pit 3 Area" on the exhibit and refer to it as Pit #3 in the applicable module narratives. Alternately, remove all reference of this pit area from the application. (Throughout the remainder of this comment letter, the area of Portals 5,6,7 is referred to as Pit #3).
- d. Depict the spoil storage areas that are south of Sump 6 and on the Hawkins SMP.
- e. Relabel title of bond legend as "Exhibit 9 Phase I Bond Map Legend" since Pit #3 is not being bonded at this time, assuming Pit #3 remains in the application.
- f. Distinguish the cropline symbols (base of Benwood Limestone, Waynesburg Coal, Waynesburg A Coal) in the legend.
- g. It has been noted that Sump 5 is installed on the opposite side of UNT "E" from where it is shown on the exhibit. Revise the exhibit to correct this and verify the other sumps are shown in the correct locations.
- h. Revise per any applicable Module 10 comments below (depict areas to be reclaimed once there is complete transition to underground mining, etc.)
- i. Depict Borehole/Well MW-TH-6, and Ondrick well (boring) which are missing from the exhibit and add the MW-1 label (Module 9 checklist 9z).
- j. The current symbol used on map and in legend for existing versus proposed culverts is too similar to distinguish between the two. Provide a different colored symbol and include diameter and material for all culverts.
- 52. The benching depicted on the Exhibit 9, discussed in the Module 10, and detailed in the bonding calculations for Pit #2 does not match field conditions. Instead of three benches with a width of 35 feet, 25 feet, and 25 feet, it appears from a field visit that there is one bench approximately 10 feet in width. Revise the application or modify the conditions in the field to meet regulatory requirements. (§77.104, §77.571)
- 53. There is a 100-foot highwall offset line depicted on the Exhibit 9 and 15.2. Ensure that a discussion is included in the appropriate narratives explaining the purpose and justification for maintaining only 100 feet of lateral distance between underground mining and current or reclaimed highwalls. (§77.104)
- 54. After a field review, it appears that open space within the permit boundary is limited. Please depict the parking area for additional employees that will be working in the underground mine, additional equipment storage and repair areas, and any additional trailers or buildings to be utilized for tag-in/out, emergency response, etc.

Module 10: Operational Information and Bond Calculations

55. Add a section in Module 10.1 titled "Surface Mining Pit #3" area and include a narrative discussion. (This pit area is shown as an unlabeled pit area on the Exhibit 9, with Portals 5 through 7, but only touched upon in the second paragraph of the Module 10.1 Underground Mining Section.) Pit #3 can be described without bonding this area at this

time and indicating it will be included under a future Phase II bonding increment. If this area and portals are not clearly discussed in Module 10, they must be removed from the Exhibit 9 and a major revision will be necessary to add them in the future. (§77.104, §77.452)

- 56. Module 10.1 appears to suggest that Pits #1 and #2 can be bonded separately, however since both are currently existing, both must be included in initial bonding. Please clarify this by eliminating the phrase "for bonding purposes". (§77.104, §77.193, §77.202)
- 57. Add the expansion of Sedimentation Pond P-1 into the narrative to describe when it will occur compared to other activities. (Pond P-1 is to be revised per Module 13 comments). The Pond P-1 expansion is expected to be conducted prior to expansion of Pit #1. (§77.104, §77.452)
- 58. In the 4th paragraph of Module 10.1, ensure elevations given in Pre-application Comment Response 44 for 100-year flood elevation ranges are incorporated into Pit #1 discussion. In the 7th paragraph, state that the Super Silt Fence will be placed along the Benwood Limestone outcrop and remove the phrase "as needed". Discuss, upon permit issuance, whether mining activities will occur concurrently in the Pit #1 and Pit #2 areas or sequentially. (§77.104, §77.452)
- 59. Please add a section heading of "Equipment List for Surface and Underground Mining" above the three equipment paragraphs on Page 10-3 since both surface and underground equipment is listed in this area, rather than keeping it undistinguished under the Underground Mining Area section. (§77.104)
- 60. Revise the narrative in Module 10.1 for the following: (§77.104, §77.452)
 - a. Reference the portal numbers shown on the Exhibit 9 throughout, for clarity, rather than "main mine portals" "second set", etc.
 - b. The Exhibit 9 depicts that Pit #2 area is to be utilized for spoil storage but this not mentioned in the narrative.
 - c. The Exhibit 9 depicts four entries in the existing highwall (Pit #1) area with three additional in a proposed eastern faceup area (to be separately discussed as Surface Mining Pit #3 area). The narrative discusses the possibility for six portals in the existing highwall (Pit #1) while the bonding calculations only account for three, and only four are shown on the Exhibit 9.
 - d. Make a clear statement that a permit revision and additional bonding will be necessary for the three additional portals proposed in the Pit #3 area or if more than three portals will be utilized in Pit #1.
 - e. It may be beneficial to discuss the underground mining entries in separate sections one for the proposed entries in Pit #1 and one for the undeveloped Pit #3 area.
- 61. The 10.1 narrative regarding the underground mining area discusses that a lack of groundwater/pit water at the existing Maggie Lynn quarry suggests that there should be no discharges from the underground portals. Module 15 discusses drainage from the portals occurring, particularly in the early stages of mining underground, and that water will be present within the underground mine and require management. Existing Pit #2

- contains water and drill logs indicate a presence of water. Typical underground permit applications account for mine water with an estimate of 0.5-1.0 gpm per acre unless data indicates that a higher flowrate should be utilized. Please include an estimate of underground water to be directed to pond P-1 and include that in the designs or propose an additional settling/clarification pond. (§77.104, §77.452, §77.457, §77.461, §77.551)
- 62. Revise the 3rd paragraph under the Module 10.1 Underground Mining Area narrative to adjust the proposed thickness of limestone to be mined to be consistent with the Module 15 comments from the Bureau of Mine Safety (BMS) that require a minimum of 15 feet of Benwood Limestone roof material to be left in place, along with the five feet of Benwood Limestone left in the floor below the removal area. Remove the sentence regarding the option for additional retreat mining. (§77.104, §77.452, §77.551)
- 63. Revise the 4th paragraph under the Module 10.1 Underground Mining Area narrative and the bullet list, to be consistent with the BMS restrictions and continue to refer to Module 15 for details: 1) There will be no removal of Benwood Limestone below the normal pool elevation of Tenmile Creek; 2) There will be a solid fifteen (15) foot thick section of the Benwood Limestone left intact above the underground mined section of the mine and no shales or siltstones will be used for roof materials; 3) There will be a solid five (5) foot thick section of the Benwood Limestone left intact below the underground mined section of the mine; 4) There will be a three hundred (300) foot barrier between Tenmile Creek and the underground mining section of the mine. (§77.104, §77.452, §77.551)
- 64. Revise the 10.2 and 10.5 narratives, and other modules as needed to discuss the Pit #3 area. Enough information must be provided for the Department to evaluate the proposed activity even though bond is not currently proposed for this area. Alternately, this faceup area could remain inside the proposed surface boundary, but all discussion of the future entries in the narratives or depiction on the Exhibits 9, 15.2, 18 should be removed. It could be indicated that this area is a Phase II with entries and erosion and sediment (E&S) controls to be added in a future major permit revision. (§77.104, §77.452, §77.456)
- 65. The narrative in Module 10.2c) does not identify the total acreage of the pit floor or the acreage of the final graded slopes as required in the question. Revise. (§77.104, §77.456)
- 66. Module 10 requires revision for consistency regarding the thickness of limestone removal, thickness of roof, and thickness of floor. The 10.1 narrative indicates that 25 feet of limestone will be removed, and the roof will be 7-25 feet thick. In the next paragraph about minimizing environmental impacts includes that the roof and floor remaining will be 5 feet each. Additionally, in Module 10.2, a maximum thickness of limestone removal will be 40 feet. (§77.104, §77.452)
- 67. Revise the 10.2 narrative and details per the following comments: (§77.104, §77.571, §77.572)
 - a. The Pit #1 schematic cross-section on page 10.4 depicts a 16-ft wide pit above the 40-ft working face, whereas this bench width is required to be 25-ft minimum by regulation. Provide a plan to modify the conditions in the field to meet the

- minimum dimensions required and the bench widths discussed in the Underground Mine Area section.
- b. Provide a detail for the Clyde Holdings property expansion area of Pit #1, upon which work is currently occurring on site. Utilize the correct benching widths and revise the Exhibit 9 benching contours.
- c. The Pit #2 schematic cross-section and bonding details shows a 35-ft wide bench above the 40-ft working face, but the narrative states the bench above the Benwood Limestone will be 25-ft wide. Revise the narrative for the wider bench.
- d. The Underground Mining Area discussion (presumed to apply to the Pit #1 area) states 25-ft benches will be developed at the interface of the Benwood Limestone and overlying shale/siltstone, while a 16-ft bench is shown in the Pit #1 diagram and appears to be what is present in the field. This section also states a 25-ft wide bench will be maintained at the rock/soil interface, but only 16-ft wide benches are shown on the diagram. Revise the schematics on Page 10-4 to depict the Benwood Limestone and interface between rock and unconsolidated material.
- e. Show the setback between the highwall and the bonded area, based on material type at top of highwall.
- f. Include discussion and benching details with schematic on the proposed Pit #3 area unless this pit is removed from application.
- 68. In Module 10.3, Please specify the collection ditches and diversion ditches already existing by number. (§77.104, §77.452, §77.454)
- 69. Expand Module 10.4 to describe areas that will be reclaimed upon completion of the transition to underground mining (Pit #2 area at minimum; other areas as applicable) and depict these on the Exhibit 9. (§77.104, §77.452, §77.454)
- 70. Revise the Module 10.6 narrative to describe pits by number for clarity. Clarify what is meant by "top strata" versus topsoil and what it will consist of. Identify where "top strata" will be segregated on the exhibit. (§77.104, §77.452, §77.454)
- 71. Incorporate the Pit #3 area into the Module 10.5, 10.7 and 10.8 narratives and indicate how encountered Waynesburg Coal or spoil/special handled material that may be encountered will be handled during bench development in 10.7 and 10.8. Otherwise delete Pit #3 from the application. (§77.104, §77.452, §77.454)
- 72. Incorporate the four Farmline Map gas wells and three historic oil or gas wells mentioned in the Exhibit 6.2/9 comments into the Module 10.9 narrative. Discuss what an applicable underground mining barrier will be or reference a Module 15 section for this information. (§77.104, §77.452, §77.454, §77.504)
- 73. Revise the Module 10.10 narrative to indicate the fate of monitoring well MW-1, which was not backfilled, and discuss MW-TH-6, which is shown on the Exhibit 6.2 as a monitoring well background sampling location. (§77.104, §77.452, §77.454)
- 74. Revise the Module 10.11 narrative per the instructions regarding Waynesburg Coal country bank mines to add a sentence to identify how many and where they are located

- (refer to nearby UNT or other surface feature for locations of each) and ensure all entrances are shown on the exhibits; it is difficult to discern whether the symbol is present for the bank mine near MP 9. (§77.104, §77.452, §77.454)
- 75. Revise Module 10.14 to discuss that the overhead electric line has been installed to the pit floor. The Exhibits 6.2 and 9 show this electric line and Module 17 discusses the installation was done in Spring 2021. Include the utility owner and depict the right-of-way width on the exhibits. (§77.104, §77.452)
- 76. If the Pit #3 area is to be permitted at this time, information on the mineral haulage methods (off-road rock trucks) will be necessary and the following variance updates will be required as replacement for existing agreements must be referenced in Module 10.14. (§77.452, §77.456)
 - a. The Pipeline Relocation and Crossing Agreement from Equitrans, L.P. dated December 23, 2010 specifies a 40-ton weight limit for the WM102 2" crossing. Loaded rock trucks will easily surpass this weight limit. Acquire a revised crossing agreement or remove Pit #3 from the application.
 - b. The specific equipment in Exhibit B of the Road and Blasting Encroachment Agreement with Equitrans, L.P. dated January 5, 2011, for the 16-inch H-103 pipeline does not include rock trucks. Acquire a revised crossing agreement or remove the eastern faceup proposal from the application.
 - c. The Mining Variance dated July 2, 2012 with Equitable Gas, LLC for the 4-inch D-480 road crossing does not include rock trucks. Acquire a revised crossing agreement or remove Pit #3 from the application.
- 77. The attachments to Module 10 on pages 10-10 through 10-14 describe requests made by the landowner of Property 1 under Maggie Lynn Quarry (SMP 63100401), regarding: 1) Leaving Pond P-1 and associated collection ditches (CDs) post-mining (pg. 10-10; 2) Reclamation to other than approximate original contour (AOC) (pgs. 10-11, 10-12); 3) Leaving haul road post-mining (pg 10-13); 4) Prime farmland negation/leaving haul road (pg. 10-14). Each of these agreements must be resubmitted and must refer only to the proposed Maggie Lynn underground permit, with the originals submitted, because if the underground permit is issued, it will replace SMP 63100401, and in addition, surface activities are changing. Also, some of the agreements will be applicable to more parcels than Property 1 and the haul road agreement must include the jointly owned Property 5 and be signed by both owners. Allowing Pond P-1 as a permanent structure will be subject to the requirements of §77.530 and a Chapter 105 permit will be needed. (§77.104, §77.462, §77.530, §77.593, §77.631)
- 78. The following comments apply to the Bonding Increment Application and Authorization to Conduct Noncoal Mining Activities (Form 5600-FM-BMP0304) provided under Module 10.15. (§77.104, §77.193, §77.202)
 - a. In Part A of Page 1, Please list three, rather than two landowners to reflect the joint ownership of Property 5 and adjust acreage accordingly. Properties 1, 3, and 4 acreage must be separated from Property 5 acreage, which has joint ownership.
 - b. Please delete the stray "Clyde Holdings, Inc." shown after the first box under Part B.

- c. Upon Module 5 revisions, the separate original Consent of Landowner Forms for Properties 1,3, and 4 and for Property 5 will be filed under 63192001. Please revise Part B on Page 1 to reflect that, and Property 5 joint ownership accordingly. (The Property 2 Clyde Holding, Inc. original will be relocated to the 63192001 file.)
- d. Add the date of the bond calculations submitted with the response to comments in Part E, No. 3.
- 79. The following comments apply to the Bond Calculation Summary Noncoal Consolidated (Form 5600-FM-BMP0474) and the associated detail forms. Bond calculations are intended to portray the Department's costs for reclamation which may differ from the applicant's costs. (§77.104, §77.193, §77.202)
 - a. Indicate what Noncoal Bond Rate Guidelines (BRGs) are used upon resubmittal. Ensure the most recent BRGs are used. Revise all reclamation costs to the rates that are effective April 1, 2023 for trucking spoil/topsoil >500 ft (\$2.50/cy) and revise the relevant detail pages and forms to clearly reflect which areas will require trucking versus being pushed with a dozer.
 - b. Update Pit #1 and Pit #2 bonding to reflect a recent survey of each pit.
 - c. Spoil storage is depicted on the Exhibit 9 in the Pit 2 Area. Ensure that spoil costs clearly account for this and are utilizing the appropriate haul distance rate.
 - d. Since Pit #3 is not being bonded at this time, after the mine name, indicate (Phase I) or add prominent note to page bottom of Form 5600-FM-BMP0474 to indicate these are Phase I Bond Calculations (unless Pit #3 is removed from application).
 - e. Page 2 provides backfilling costs for Pit #2 and Page 3 provides highwall blasting costs for one pit. Include reclamation of Pit #1 as well as Pit #2, as Pit #1 will need to be reclaimed in the event the permittee's plans change. Distinguish pit numbers on the Page 3 detail page.
 - f. Provide a Maximum Pit #1 volume diagram similar to what was provided for Pit #2. Ensure Module 10 comments on pit configuration (benching) are incorporated in bond calculations.
 - g. Bond costs for tree planting must be provided for areas of forestland during reclamation. The current calculations only provide for revegetation on a per acre amount while trees are a per stem cost.
 - h. Provide bond cost for the reclamation of 10.2 acres of riparian area adjacent to the UNT E relocation.
 - i. Bonding for sealing is provided for three portals, however four are shown on Exhibit 9 in Pit #1, although the Module 10 narrative appears to suggest up to six portals may be installed in Pit #1. Depict and include sealing costs for all Pit #1 portals that may be installed.
 - j. Included borehole sealing costs for any boreholes that have not been sealed (such as DH-5, possibly H-BH-2 and MW-TH-6, or others. While it is understood that plans are to mine through MW-TH-6, sealing must be bonded in the event this does not occur.
 - k. Figure 9 appears to depict two above ground steel tanks side by side. Revise structure demolition detail page as needed. Please utilize the most recent version of R.S. Means or similar reference for demolition rates, instead of 2018 version.

- 1. Mobile processing equipment still requires removal from the permit by the Department should forfeiture occur and must be included in the bond calculations. Revise.
- m. Burned out mobile processing equipment is still present on the permit. Include bond calculations or remove the equipment from the site.
- n. Include bond calculations for removal of large equipment tires, scrap metal, refuse, etc. permit wide and include the areas on the adjacent Hawkins SMP 63813210 that are used by SMP 63100401.

Module 12: Erosion and Sedimentation Controls

- 80. Revise the Exhibit 12 Water Handling Plan map to incorporate the expanded permit boundary per Module 1 comments and exhibit comments. Also delineate the drainage areas for each collection ditch separately. (§77.104, §77.460, §77.525, §77.457)
- 81. Design worksheets for ST-1 are provided beginning on page 12-55. The Department is not able to locate ST-1 on the exhibits or narratives. Revise. (§77.104, §77.460, §77.525, §77.457)
- 82. The current location of CD-2 in the field and as depicted on the Exhibit 9 places flowing water at the base of two lime dust stockpiles. This contributes to additional sediment loading to pond P-1. To prohibit the unnecessary additional of fines to the sediment pond, please address the following.
 - a. Water pumped from Pit #2 and the proposed Pit #3 should remain in a closed conduit until reaching CD-1 or preferably the sediment pond directly.
 - b. Modify CD-2 and the lime dust stockpiles to keep the flowing water away from the lime dust. Utilization of berms, concrete barriers, piping, etc. should be considered.

Module 13: Impoundments – Treatment Facilities

- 83. The design of sediment pond P-1 must be revised for the following. Ensure that the new design certification is submitted on the most recent version of Form 5600-PM-BMP0408 as required by instructions for 13.3d). (§77.461, §77.525, §77.527, §77.531)
 - a. Sediment pond design guidelines for mining operations were clarified in January 2022 with the release of SOP No. BMP-013. This policy reinforces that 2,000 cf/acre is to be provided for sediment storage in addition to avoiding volume reductions except when the long-term effectiveness has been considered. The current design utilizes a sediment storage zone of 1,000 cf/acre in addition to storm storage volume reductions.
 - b. Estimated water contributions for the entire life of the surface and underground operation should be included in the design of pond P-1. This would include any water pumped from the underground mine or faceup sumps. Alternately, a new pond should be designed to handle the underground mine and faceup water.
 - c. If flocculants are proposed for use in collection ditches and/or Pond P-1, this must be in accordance with a PFBC-approved plan and discussed in the Module 13

- narrative, and the location of the PFBC-approved plan (i.e. NPDES permit application) referenced.
- 84. The Module 13.6 narrative indicates that sediment pond P-1 is requested to remain permanently. As noted in the comments on the Module 10 attachments above, the landowner request will need to be revised for the new permit as the old copies specify SMP 63100401 which will cease to exist if this permit is issued. In addition, as communicated during a permit revision review of SMP 63100401, permanent approval will be reviewed by the Department during Stage 1 bond release and this needs to be stated in the Module 13.6 narrative. This is especially necessary because of the ponds presence in the FEMA delineated 100-year floodplain and if a continued exemption under §105.12 is applicable. (§77.459)

Module 14: Streams - Wetlands

- 85. The Module 14.1 narrative responses indicate that there is no obstruction or constructions on Tenmile Creek even though sediment Pond P-1 is within the FEMA delineated 100-year floodplain. Revise and include a request for a Chapter 105 permit waiver which has been previously discussed during prior permit revisions. (§77.459, §77.523)
- 86. Wetlands A, B, C, D, E and the unlettered wetland adjacent to Pit 2 and the haulroad along UNT "E" are not discussed clearly in the Module 14.2 narrative. In addition, new wetland determination forms should be provided as the previous forms (if any were present) were not included in this submission and are older than 5 years. Recent communications the Department has had with the US Army Corps of Engineers revealed that wetland determination forms are considered stale after 5 years and not typically accepted at that point. Please reevaluate the site and provide current wetland determination forms and explain any reductions in wetland areas if appliable. (§77.459, §77.523)

Module 15: Noncoal Underground Mines

- 87. Module 15.1 states that the operator has a lease agreement with the owner of Properties 1, 2, 3, 4, and 5, whereas Module 5.1 Table and Note #3 state that (jointly owned) Property 5 has not been leased. Revise the application to clarify. Ensure the lease for Property 5 has been signed by both landowners. (§77.104, §77.163)
- 88. Make revisions to Module 15.1 in accordance with Module 5 comments. (§77.104, §77.162, §77.163)
- 89. Review the Exhibit 6.2 and 9 comments, many of which are also applicable to Exhibit 15.2, and make all applicable revisions on Exhibit 15.2. (§77.104, §77.454)
- 90. Revise the Module 15.5 narrative to incorporate the following requirements into the underground operations plan where needed. Note that these items will also be included as Part B Special Conditions in the Maggie Lynn Underground Mine permit, if issued. (§77.104, §77.410, §77.452, §77.454)

- a. The Mine Opening Plan submitted with the application is not complete and will be discarded by the Department from hard copies and the e-copy without review. Please discard it from any existing application hard copies and e-copies held by the applicant as well. A complete Mine Opening Plan is to be submitted to the Department's Bureau of Mine Safety (BMS) after permit issuance and will serve as the comprehensive plan for underground mining activities. At time of Opening Plan submission, include a map of operational plans compliant with Module 15.11 mapping standards. This map must include the underlying Clyde Mine Map workings in detail below the permit boundary, and 200 feet beyond the permit boundary.
- b. The Mine Opening Plan will incorporate/supersede information in Module 15. Revise the 7th paragraph of Module 15.5 on Page 15-4 to indicate this.
- c. The 7th paragraph on Page 15-4 indicates the openings may be widened to 45 feet. Add a sentence to indicate that if this is desired, this must be thoroughly discussed in the Mine Opening Plan. In addition, if this action is approved, a minor revision to adjust bond for sealing mine openings must be submitted.
- d. Incorporate into the 8th paragraph on Page 15-4, that roof bolting must be done until the first crosscut is completed underground. Indicate that after the first crosscut is completed, a roof evaluation must be performed, and a supplemental Roof Control Plan with typical drawings and recommendations to be used when weak roof is encountered must be submitted to BMS. Indicate this Roof Control Plan must be approved by BMS prior to continuing mining beyond the first crosscut.
- e. The 22nd paragraph states that a "typical" thickness of 15' of limestone will be left on roof. Revise to state that a 15' thickness on roof will be required, and the mining height will thus vary between 22 and 25 feet (22 feet where limestone is 37-feet thick).
- f. In the 25th paragraph on page 15-6, add a sentence that PennDOT is awaiting approval by the Department prior to allowing mining beneath SR 2041. This will be deferred at least until the Mine Opening Plan is reviewed, or at a later date. Therefore, indicate that a 100-foot no mining barrier from the right-of-way lines for all state-owned roadways is applicable until approval from PennDOT is secured. (SR 2024 Buckingham Road and SR 2042 Morey Road)
- 91. Add the pictures of the failure surfaces from the GEI compression tests discussed in Module 15.5 to the test results included in the Module 15 attachments. The compression tests may then be deleted from Module 7 as discussed in Comment 22. (§77.104, §77.410, §77.454)
- 92. Revise the Module 15.6 narrative to be consistent with Module 8, particularly with regard to the following. (§77.104, §77.410, §77.454)
 - a. Discuss the elevated metals in Wetland discharge 25 and Springs 26 and 27 and their source in Module 15.6a), 3rd paragraph, in addition to the elevated sulfate discussed.
 - b. Update the monitoring program per Module 8 comments.

- 93. Revise the Module 15.6 narrative to incorporate the following requirements into the underground operations plan where needed. Note that these items will also be included as Part B Special Conditions in the Maggie Lynn Underground Mine permit, if issued. (§77.104, §77.410, §77.454)
 - a. Since extensive mining has previously occurred above in the Waynesburg Coal Seam and the potential for water inflow into the limestone seam may occur, the applicant is required to submit to BMS, a Safety Zone Plan for review and approval for the proposed underground limestone operations. Reference the requirement to submit a Safety Zone Plan in Module 15.6 and indicate this will also be part of the Mine Opening Plan to be submitted upon permit issuance.
 - b. Indicate that the Clyde Mine Pool elevation must be monitored monthly throughout the operation.
 - c. The narrative of Module 15.6a) 8th paragraph states "In the event that settling is necessary, the water would be diverted into the existing Sedimentation Pond P-1." Revise to delete "In the event that settling is necessary." to clarify that all discharges from portal entries will be diverted into Sedimentation Pond P-1. (No bypass of Pond P-1 will be permitted).
 - d. Revise the Module 15.6a) 10th paragraph to reference Module 7.4 for the table of existing surface and underground mines (rather than 7.5).
- 94. In the Module 15.7 narrative, reference Module 7 for the regional geologic structure maps and regional stratigraphic column (column to be added). (§77.104)
- 95. Module 15.8 states that a sealing plan for the underground mine openings is not included due to the long-term plan to convert the underground mine site into a long-term storage facility. As noted in Response 68 to the Pre-application comments, bonding was included in the application in the event the future plans for the underground storage facility do not materialize, based on designed seals. The plans for sealing mine openings must be presented in Module 15.8 per the Module 15.8 instructions with plans and maps sealed by a registered professional engineer. The unstamped schematic shown on page 15-21 should be deleted from the application in favor of site-specific seal designs. These mine seal designs presented in Module 15.8 can then also be used in Module 10.15, which currently does not include designs sealed by a registered professional engineer. (§77.104, §77.193, §77.202)
- 96. Module 15.9 states that sealing of the underground mine openings is not proposed, however as noted in Response 68 to the Pre-application comments, bonding is to be included in the application in the event the future plans for the underground storage facility do not materialize. Bond was included in Module 10.15 for portals accordingly and this should be referenced here. (§77.104, §77.193, §77.202)
- 97. Module 15.10 discusses possible plans for underground disposal of processing wastes. Revise the module 15.10h to state that prior to conducting underground disposal of any materials, a detailed Plan for Underground Disposal must be submitted both to BMS and the Mine Safety and Health Administration (MSHA) for evaluation. This must include all aspects covered under Module 15.10, at minimum. BMS/MSHA approval must be obtained prior to underground disposal activity. This will also be included in the Part B

Special Conditions in the Maggie Lynn Underground Mine permit, if issued. (§77.104, §77.163, §77.410, §77.452, §77.454)

Module 16: Large Noncoal Blast Plan

98. Submit the complete blast plan package for review prior to any blasting-related activities, including a revised Exhibit 16.17. Ensure applicable Exhibit 6.2, 9, and/or 15.2 comments are made to Exhibit 16.17. (§77.104, §77.453)

Module 17: Air Pollution and Noise Control Plan

- 99. Please use the most current revision of Module 17 on e-Library for the corrections. (§77.104)
- 100. Speed limit specified for Equitable Gas, LLC, D-480 pipeline crossing is 5 mph but the Module 17 narrative states that the onsite speed limit will be 15 mph. Revise to indicate any areas where a further reduced speed limit is required. Ensure that these speed limits are posted onsite and enforced. (§77.104)
- 101. Revise Module 17.1 to incorporate all the equipment to be utilized for processing operations and to reference the correct Air Quality permits that authorize processing activities. Please provide copies of the issued permit authorizations for reference in the mine permit files. (§77.104, §77.455, (§77.575)
- 102. Revise Module 17.2 to indicate the following. (§77.104, §77.455, (§77.575)
 - a. Roads will be watered at least daily during dry weather to minimize the generation of dust.
 - b. Trucks must be tarped to minimize particulate loss and tarping will be enforced by the permittee.
- 103. The Module 17.3 narrative response does not sufficiently address why the proposed operations will not become a public nuisance. New processing equipment has been installed on site. Use the updated Module 17.3 on e-Library for the Module 17.3 revision. The following should be provided to allow the Department to evaluate the proposed noise pollution of the mining operation. (§77.104, §77.575)
 - a. Background ambient noise should be documented (base level).
 - b. An estimation of the noise generated by the proposed operation that will contribute to the base level.
 - c. Discussion on whether the highwall will act as a sound reflector and concentrate the noise should be discussed.
 - d. An assessment of the effect the operation will have upon the closest sensitive receptor(s). (i.e. residences, daycares, schools, outdoor recreation areas, etc.)
 - e. The above items should contain numeric data to support the narrative plans. Substantive reasoning and foundation must be provided for the characterization of noise and the proposed mitigation efforts. General estimations and guesses are not adequate. Utilization of ground surface profiles to the receptors can help demonstrate the lack or presence of line of sight from the operation.

- f. The application requires identification of all operational noise sources. Examples of noise sources include:
 - i. Mobile Equipment (i.e. construction equipment, mine equipment, backup alarms, yard equipment, trucking to and from the site entrance, engine brakes, etc.)
 - ii. Stationary Equipment (i.e. crushers, pumps, screening tower, conveyors, etc.)
 - iii. Mining Activity (i.e. spoil/extracted mineral dumping)

Module 18: Checklist and Exhibit 18 Land Use and Reclamation Map

- 104. Ensure appropriate comments made for Exhibits 6.2 and 9 are also reflected on the revised Exhibit 18. (§77.409, §77.454, §77.456)
- 105. Reclamation contours are depicted outside the bonded limit (eastern portal, Pit 3) and outside the permit limits to the east of Pond P-1. Revise. (§77.409, §77.454, §77.456)
- 106. Include the bonding limit line or any necessary Phased areas on the exhibit so it is clear which areas are to be disturbed and covered under reclamation bond. Ensure that the eastern faceup area is revised to address previous comments regarding Phased bonding or future permit revisions. (§77.409, §77.454, §77.456)
- 107. Include the acres of each land use to present within the surface permit area or bonding limits. Presenting this on the Exhibit allows a check to ensure that acreages for bonding calculations represent the proposed activities and required reclamation. (§77.104, §77.462, §77.202)

Module 19: Land Use / Vegetation

108. Please provide the most recent version of Module 19 available on eLibrary and updates needed per revised PNDI, etc. (§77.104, §77.408)

Module 20: Postmining Land Use and Reclamation

- 109. The narrative response in 20.3b) indicates that 40 feet of Benwood limestone is to be removed. Ensure that this thickness matches what will occur onsite as the Module 10.1 narrative indicates that five feet of limestone has been left on the pit floor to remain above the elevation of Tenmile Creek, and ensure consistency with the rest of the application. Revise. (§77.104)
- 110. Please revise the 20.3 narrative to explain that an alternative to Approximate Original Contour (AOC) is still necessary with the change to an underground mining operation. Typical long-term underground operations generate a large volume of fines or other waste material during processing which are usually not all sold but retained on site as spoil. Because limestone will now be removed from underground the original Alternate to AOC justification that limestone and overburden removal from the surface operation

will preclude AOC reclamation is not by itself, a valid explanation. (§77.591, §77.592, §77.593, §77.594)

Module 23: Revegetation

- 111. Please note, that the 23.1 narrative discusses performing soil tests during reclamation to determining final soil amendments and that these tests will be used for bond release requirements. Soil tests provided at the time of filing a completion report for bond release should indicate that no additional soil nutrients or amendments are required. (§77.456, §77.515)
- 112. The stream relocation information presented on Exhibit 14.1.E.3 indicates that a 100-foot width of riparian area on each side of the stream was to be planted with the various species listed. Revise the Module 23.4 to include the additional tree planting options for Zone 1 and Zone 2. (§77.456, §77.611, §77.615)

The revisions and additions you submit must satisfy the provisions of Title 25, PA Code Section 77.126 by providing an affirmative demonstration of compliance with all existing laws, rules and regulations of the Department. All revised plan drawings must bear the date of revision and the seal or signature of the engineer or person who prepared the revision. **All revised pages of the application, including the narrative, must indicate page number and date of revision.** If revisions extend beyond the original page, each additional sheet should bear the original page number and a sequential letter of the alphabet.

Please submit three hard copies and one electronic copy of all information within 21 business days (April 11, 2023). If you have any questions regarding this matter, please contact our office.

Sincerely,

Diane Roote, P.G.

Diane Roote

Licensed Professional Geologist

Bureau of District Mining Operations

cc: Application File – copy

Geotech Engineering, Inc. – email

C. Meyer, Environmental Program Manager - email

J. Edwards, Permits Chief – email

D. Roote, Lead Reviewer – email

C. Vought, Sr. Engineer – email

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