

VIA EMAIL

July 22, 2022

Ligonier Stone & Lime Company
117 Marcia Street
Latrobe, PA 15650

Re: Noncoal SMP and NPDES Application
SMT East Surface Mine
SMP No. 65210301
NPDES Permit No. PA0278491
Derry Township
Westmoreland County

Dear Applicant:

In order to continue processing the above-referenced large noncoal surface mine permit (SMP) application and National Pollutant Discharge Elimination System (NPDES) permit application, the following additions, corrections, and clarifications must be addressed. All regulatory references below are from Pennsylvania Code Title 25. Environmental Protection unless noted. **Please ensure replacement pages are numbered. In addition, on the CD submittal, please provide a full e-copy of the application, after merging replacement pages, to ensure the Department has an accurate e-copy.**

Module 1

1. As the Department mentioned in a June 7, 2022 phone call to Earthtech, Inc. (ETI), the Pennsylvania Natural Diversity Index (PNDI) submitted with the application has a review date of 1/17/20 and is expired and no longer valid. Therefore, a new search must be conducted. Please provide a new PNDI. (§77.104, §77.126)

Module 2/NPDES Application

2. The following comments apply to the NPDES application. Please provide appropriate replacement pages with the response to this letter, or by email prior to the full response. (§92a)
 - a. In Section A, provide the date of the revised Exhibit 9 requested below for No. 13. Revise No. 14 to delete “unnamed tributaries to McGee Run” since no proposed outfalls will discharge to UNTs to McGee Run. Please revise No. 15 as UNT Stony Run (CWF), UNT Conemaugh River (CWF) and Conemaugh River (WWF) for clarity.
 - b. In Section C, please include the Process Ponds 1 and 2 on the non-discharging line at the bottom of Page 3. List the coordinates for the Process Pond 1 outflow to Process Pond 2 and the Process Pond 2 outflow to SP-3.
 - c. Revise the flow diagram to include Process Ponds 1 and 2 and indicate any discharges to SP-3 that may occur from the process pond(s) during a dewatering/cleaning event or in the event of a pump malfunction.
 - d. Comment 5f of the Department’s Oct. 22, 2021 comment letter for SMT East asked that the temperatures for Section D, No. 24 be re-evaluated in light of all of the outfalls discharging to CWF streams where the temperature limits range from 3.3°C. (38°F.) in Jan. and Feb. to 18.9 °C (66 °F) in July and August. The units were changed from °C to

- °F. in response to the comment, but 85 °F still exceeds summer CWF of 66 °F. in Ch. 93 by 19°F. Please revise page 4, No. 22 to address this, or No. 5 to indicate maximum outfall temperatures to ensure no thermal impact to the CWF receiving streams at downstream monitoring points.
- e. Correct the conductivity units in Item 24 to umhos/cm.
 - f. Since the treatment facility has been added as requested, provide a separate Section D for the TP-1 outfall (Outfall 003) since it is not “substantially identical” to sediment pond outfalls. You may wish to number these two pages as 6a and 6b for insertion between pages 6 and 7.
 - g. Because the outfalls are located near the headwaters of the receiving streams and dilution potential is limited, revising the estimated concentrations in No. 27 will clearly convey EPA Table III parameters will not require NPDES permit limits at this time. Revise the No. 27 estimated concentrations to show detection limits less than the Target Quantitation Limits (TQLs) for each constituent. The estimated concentrations should meet the Environmental Protection Agency’s (EPA) “Sufficiently Sensitivity Methods” rule (79 FR 49001). The TQLs may be found at the Department’s [Water Quality Models and Tools \(pa.gov\)](#) webpage on the References tab of the Toxics Management Spreadsheet or in Attachment B of Clean Water application number 3800-PM-BCW0009A. Ensure the laboratory meets the TQLs when analyzing future effluent characterization samples.
 - h. With the addition of the treatment pond and potential use of caustic soda/soda ash briquettes per Section C, please add these chemicals to the Section F3. Inventory of the PPC Plan since future storage of these may be needed in the future.
 - i. On the PPC Plan Emergency Contact List, use an appropriate contact for the nearest PWS, which does not appear to be MAWC.

Module 5/Exhibits 6.2, 9, 18

3. Update the Exhibits and Module 5 to account for Property 20 recently being purchased by Ligonier Stone and Lime Company (July 5, 2022). (§77.104, §77.162, §77.410)

Module 7

4. While no overburden analysis is necessary, the Module 7.5 narrative must be revised to reference the Module 10.7 and 10.8 narratives regarding where acid-forming materials could be encountered and how they will be handled once those modules are revised per the comments below. (§77.104, §77.596)

Module 8

5. UNT 6 enters UNT 4 beneath Limestone Drive along the west side of SR 217 via a 15” CMP. Because UNT 6 is now a receiving stream for Outfall 004, monitoring point (MP) 105 should be collected upstream of the confluence of UNT 6 with UNT 4. ETI clarified in a 6/7/22 phone call with the Department that MP 105 is collected directly from the downstream end of the 48” concrete culvert under SR 217, thus upstream of UNT 6. Please clarify this on the MP 105 sample description on its 8.1(A). (§77.104, §77.521, §77.532)
6. Per Comments 16 and 17, please revise Module 8.6b) if necessary, to describe the water source(s) to be used for the process ponds and discuss the risk of potential hydrologic impact. (§77.104, §77.521, §77.532)

Module 9/Exhibit 9/Exhibit 9A

7. During the Department's review of the application, the following items were noted as needing more information. Please revise the Exhibit 9 and 9A per the following comments. Also, discuss in the appropriate modules if required. (§77.104, §77.410, §77.454, §77.457, §77.502)
 - a. Module 10.14 discusses 20-foot protection barriers around utility poles, but no barriers are depicted or mentioned on the exhibit. Depict the barriers and/or include a note on the exhibits.
 - b. Add a note to the exhibits specifying the overhead lines clearance requirements per OSHA or National Electric Safety Code (NESC) Rule 232 based upon the height of vehicles that will be present on site.
 - c. Revise the Exhibit 9 to show the pipe size carrying UNT #6 beneath Limestone Drive.
 - d. Add a symbol to the legend for the stormwater inlets at the head of Limestone Drive.
 - e. Depict the 30-foot width right-of-way (barrier area) for the Penelec overhead electric line in the Phase 2 area on the Exhibit 9 and ensure no operations are depicted in this area per Comment 12a.
 - f. The text tied to the discharge pipe of the process water pond is illegible on the Exhibit 9 and may be deleted since it is shown on the Exhibit 9A.
 - g. Two head of stream wetlands are now depicted on the exhibits after completion of the wetland delineation. To protect the headwaters of unnamed tributary #4B and #6, please provide the 100-foot stream barrier line from the edge of the wetlands.
 - h. Consider revising the Phase 1/Phase 2 boundary and the Phase 1 support area and acreage on both exhibits per the Module 10.14 comments below to allow construction of both Enterprise Products pipeline crossings (and Buckeye Partners crossings) during Phase 1.
 - i. Include a note on the Exhibit that the 100' stream barriers will be permanently marked in the field in addition to marking any approved variance distances.

Module 10/Bond Calculations

8. The Module 10.2c) response indicates that swell of overburden will compensate for the removal of the 20-foot thick Benwood Limestone. The mining program typically accepts a 10% swell factor for reclamation calculations. The theoretical 30% swell factor calculated using Federal Highway Administration guidance is not justified as the shale component is dependent on the density of the shale unit being encountered. Shale has two listed swell factors, the 49% specified in the application, and a -17% unit that has a lower density. Without site-specific laboratory testing for each material unit to be spoiled, please provide the expected average surface elevation drop utilizing a 10% swell factor. (§77.104, §77.456)
9. Please revise Modules 10.7 and 10.8 per the following comments. (§77.104, §77.596)
 - a. Cross-section A-A' and Exhibit 9 indicate disturbance of spoils on the west side of the Phase 2 pit development. Please revise the first paragraph of Module 10.7 to explain and if needed, expand the discussion of where incidental acid-forming materials could be encountered.
 - b. Please revise the last two sentences of the second paragraph of Module 10.7 to indicate that black shale and coal "will be" stored in the potential acid producing material area, and "will be" applied to neutralize any carbonaceous material (instead of "may be").
 - c. Module 10.7 describes proper alkaline addition (per testing results). Please explain what alkaline material will be used and how the proper amount will be determined.
 - d. The Module 10.8 narrative references the "PA DEP Acid Producing Rock" guidance. Please provide the actual title, author, and year to cite the document that will be used.

10. It is indicated in the 10.9 response many gas wells have been or are planned to be plugged. Please note that if gas wells are plugged in the future and mining is proposed in those areas, a mine permit revision will be needed to mine through the old well head area. (§77.104, §77.504)
11. The Department noted that the applicant was not able to obtain a plugging certificate for gas well W12. Regarding gas wells W11 (Bentley 1) and W12 (HT Barclay 1), the Department has attached available information from its files, including a plugging certificate for W11 and abandonment information for W12. It is unknown how reliable the given locations are, and what will be found in the field. It would be in the best interests of the applicant to attempt to locate the abandoned well casings with a metal detector and to exercise caution when working in those areas. (§77.104, §77.504)
12. The following comments pertain to Module 10.14. (§77.104, §77.452)
 - a. A relocation letter has been supplied for the electric lines in the Phase 2 area. However, a 30-foot right-of-way (ROW) is explicitly indicated in the Penelec letter which prohibits mining. A no-mining barrier will remain in place until the line relocation occurs. Please revise the exhibit and narrative to include the 30-foot barrier and revise the depicted operations to not pass through this area. Once the relocation occurs, a permit revision (Phase 2 bonding revision) can be submitted to mine through the previous utility area.
 - b. It is indicated that warning signs will be placed at overhead electric crossing locations. Please indicate the OSHA, National Electric Safety Code, or other source for the energized line clearance distances to be utilized and state the source and distances by vehicle height in Module 10.14.
 - c. The paper copy of the pipeline crossing variance from Apollo Resources is blurry and the electronic copy is almost unreadable. Supply a clear copy of both the paper and electronic versions for the Department's files.
13. The following comments pertain to the crossings of the buried Greensburg to Chelsea pipeline owned by Enterprise Products Operating LLC and approved by the "Letter of No Objection" dated December 16, 2021 as well as the Buckeye Partners pipeline crossings. (§77.104, §77.452)
 - a. The above letter contains an expiration date six (6) months after signature (June 16, 2022). The mine permit cannot be issued until a non-expired signoff from Enterprise is provided. The timing of submission can be coordinated with the Department.
 - b. For permitting/operational efficiency, it is suggested that the Enterprise Products (and Buckeye Partners) crossings to access Phase 2, as well as those to construct Phase 1 process ponds and SP-3, are both constructed at the same time. This would eliminate future crossing agreements being necessary. If the applicant wishes to do this, revise the Exhibit 9/9A regarding the Phase 1/Phase 2 delineation and add the necessary support acreage for the crossing that accesses Phase 2 to be part of Phase 1.
14. Revise bond documents using the current rates and by addressing the following comments. (§77.193, §77.195, §77.202)
 - a. Include tree planting within the forested area where CD-4 passes through the 100-foot stream barrier for UNT #4A.
 - b. If the applicant chooses to complete all crossings during Phase 1, revise the support acreage to include the Enterprise Products and Buckeye Partners pipeline crossings for Phase 2 access as part of Phase 1 to work within the parameters of the utility agreements.
 - c. On the Bonding Increment Application, revise the Part A "Acres to be Affected" to match the acreage needed only for Phase 1 mining and support acreage.

Module 13

15. The Module 13.1 narrative appears to describe possible flocculant use using procedures not included in the written plan sent to and approved by the Pennsylvania Fish and Boat Commission (PFBC) which discussed only gel log use. For example, a drip system to the SP2 inflow or recirculation is described which was not included in the submittal to PFBC. Please revise the narrative to describe only the approved gel log use or provide PFBC approval for a drip system or recirculation within ponds with discharge potential. (§92a, §77.527)
16. No designs or pond certification forms have been provided for the process water ponds. Please provide, addressing the comments below. (§77.521, §77.526)
 - a. Include an emergency spillway in the designs in case of pump malfunction.
 - b. Provide a pond certification form as the impoundment will store more than 2,000 cf of fluid.
 - c. Indicate on the Exhibit 9A or other exhibit the proposed closed conduit, pumps, collection sumps, etc. necessary to operate the material washing operation.
 - d. The application is not clear on how upslope water will be kept from flowing into the incised process water ponds. Approximately 6.75 acres including the footprint of the pond contribute to the process water pond as estimated using the Exhibit 9A.
17. Discuss in Module 13 the source of water for the processing plant (rainfall, public water supply, new well(s), combination thereof) and address the following. (§77.457, §77.521, §77.526)
 - a. Permit reviews of other aggregate processing operations has shown that surface water collected in sediment ponds is typically not enough to provide a stable source of water for processing and dust suppression during periods of dry weather.
 - b. If capture and reuse of surface water is the main source of processing water, an evaluation of the hydrologic impacts to the receiving streams/wetlands must be performed and substantiate that no impacts to the quantity of water reaching the receiving stream/wetlands will occur.
18. The 13.3 c) response indicates that ponds with drainage areas less than 20 acres do not require a principle spillway, however a spillway is provided. Please note, this acreage threshold is not present in the current design standards/guidance. (§77.521, §77.526)
19. Clearly indicate in the NPDES flow diagram and in the 13.3 narrative that the dewatering discharge from the process water pond will report to sediment pond SP-3. (§77.104, §77.452, §92A)
20. Sediment pond SP-1 will be formally evaluated to remain permanently during the review of the Stage 1 completion report. At that time, a determination will be made whether it can remain as a post-construction stormwater management facility or be re-permitted through another program/entity. (§77.457, §77.521, §77.530)
21. With the landowner request to retain SP-1 and its associated ditches, the permanent impact to the hydrologic balance must be analyzed. (§77.457, §77.521, §77.530)
 - a. Collection Ditch CD-2 intercepts stormwater flow currently destined for UNT #4B and redirects it to SP-1 and into UNT #4A.
 - b. CD-1, CD-4, and SP-1 itself intercepts upslope surface water from reaching the wetland parallel to the proposed embankments of SP-1.

22. The 13.6 narrative is to contain a removal timetable and plans for impoundments. TP-1A and TP-1B were omitted from the narrative description. Revise the narrative to include treatment ponds TP-1A and TP-1B. (§77.104, §77.461, §77.527)

Module 14

23. Several pipe culverts and inlet boxes are depicted on the Exhibit 9A outside the right-of-way of T-970 (Limestone Drive). An 18" CPP is within the wetland and UNT #6. Discuss when these structures were installed, by whom, and why they were not depicted on the initial submission since they are now shown as existing. If structures were installed in support of the proposed mining activity, please include them in the Module 14 as encroachments. (§77.104, §77.504)
24. Revise the narrative response for Stream Variance #2 under Module 14.1 c) and i) to describe the resident aquatic community or lack thereof. (§77.104, §77.457, §77.504)

Module 17

25. The Air Quality Plan Approval secured through the Southwest Regional Office and the Module 13.3 indicate that washing of materials will be utilized in conjunction with the installation of a process water pond. Revise the 17.1 checkboxes and corresponding narrative response to describe the proposed operations. (§77.104, §77.575)

Module 18/Exhibit 18

26. Please revise the Exhibit 18 to depict the collection ditches to SP-1, as the exhibit must reflect the ditches and ponds to remain permanently. (§77.104, §77.410, §77.454)
27. Revise the reclamation cross section to account for changes resulting from utilizing a 10% swell factor requested in Comment 8. (§77.104, §77.410, §77.456)

Module 20

28. As noted in a June 28, 2022 email to ETI, the Department has copies, but not the original, of the land use change of 12.0 acres from forestland to unmanaged natural habitat. Please submit an original. (§77.104, §77.162)

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 applications, 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 the original, three hard copies and one compact disk (CD) of all information within 21 business days or by August 22, 2022. **Ensure the CD contains an e-copy of the full, merged application.** If you have any questions regarding this matter, please contact me at 724.591.0937.

Sincerely,



Diane Roote
Licensed Professional Geologist
District Mining Operations

Enclosure: PADEP Gas Well Abandonment/Plugging Information

cc: Earthtech, Inc. Uniontown – email
Application File – hard copy
C. Meyer, Environmental Group Manager - email
M. Evans, MCI – email and hard copy
M. Somogyi, MCIS – email
C. Vought, Sr. Engineer– email
M. Rudnik, Engineer – email
D. Roote, Lead Reviewer – email
e-FACTS – email