

"VIA EMAIL"

June 23, 2017

Specialty Granules, LLC Matthew McClure, Director EHS and Mine Permitting 1455 Old Waynesboro Road Blue Ridge Summit, PA 17214

Specialty Granules LLC Re:

"Northern Tract Quarry"

Pre-Application No.: 01170301

Township: Hamiltonban

County: Adams

Dear Mr. McClure:

A Pre-Application meeting for the above referenced mine was held on June 13 with the following in attendance:

Name	Representing
Thomas A. Nalisnick, P.E.	Pennsylvania Department of Environmental Protection
Chad Paronish	Pennsylvania Department of Environmental Protection
Rock Martin, P.G.	Pennsylvania Department of Environmental Protection
Mathew S. McClure	Specialty Granules LLC (Operator)
Kevin D. Moore, P.E.	Specialty Granules LLC (Operator)
Anthony Shepeck, P.G.	Specialty Granules LLC (Operator)
Matt Watson	Specialty Granules LLC (Operator)
Bob Shusko, P.E.	D'Appolonia (Consultant)
Mike Ward, P.E.	D'Appolonia (Consultant)
Laura Berra, P.E.	Skelly and Loy (Consultant)
Andy Brookens	Skelly and Loy (Consultant)
Doug Dinsmore	Skelly and Loy (Consultant)
Debby Nizer	US Army Corps of Engineers
Rusty Ryan	Adams County Conservation District
Jeff Painter, P.G.	Pennsylvania Game Commission
Doug McLearen	Pennsylvania State Historic Preservation Office
Steve McDougal	Pennsylvania State Historic Preservation Office

The comments listed below were reviewed at the Pre-Application Meeting. Included with each comment in bold type is follow-up information that occurred during the meeting and the resolution agreed upon by all parties. Please note that the email copy of the meeting follow-up letter is the only copy of the letter being sent and a hard copy will not follow.

MODULE 1

1. <u>Section C – Site Information:</u> Revise section C to include the correct operation/site name to be consistent with the Exhibits submitted with the application. Currently, section C shows the operation/site name to be "Northern Tract" and the Exhibits show "Northern Tract Quarry". Also, see Module 8, comment number 3.

The consultant acknowledged and will revise the operation name to be consistent throughout the permit application with the permit submittal.

2. <u>Section C – Site Information:</u> Revise the name(s) of receiving stream(s)/Chapter 93 Classification to include the Unnamed Tributaries to Toms Creek.

The consultant acknowledged and will include the Unnamed Tributaries to Toms Creek with the permit submittal.

3. <u>Section C – Site Information:</u> Revise the acres shown in the Mining Area to include the rock/mineral removal of the acreage shown outside of the proposed permit area, located between the proposed permit area and the adjacent Pitts Quarry, SMP No. 01930302. Also, see Module 9, comment number 2. (77.452)

The consultant acknowledged and will revise the mining area to include the rock/mineral removal located between the proposed permit and adjacent Pitts Quarry with the permit submittal.

4. <u>Section H – Additional Related Information:</u> Revise Section H "Additional Related Information", number 5 to include the Pre-Application No. 01170301. This preapplication number will become the SMP number when the full application is submitted.

The consultant acknowledged and will include the Pre-Application number with the permit submittal.

5. Provide correspondence from the U.S. Fish and Wildlife Service in regards to Indiana Bat and the historic copper shaft shown on the attached Photograph 4 of the January 29, 2016, Threatened and Endangered Species Coordination Letter. The photograph description indicates that the historic copper mine shaft meets criteria for potential bat hibernaculum. (77.126(a)(10))

The consultant will provide correspondence from the U.S. Fish and Wildlife Service in regards to the Indiana Bat with the permit submittal.

6. A review of the conditional use application with Hamiltonban Township indicates that the applicant will implement all the conditions agreed upon in the narrative to the conditional use permit and the additional conditions sections of the agreement. Note that these conditions must be met prior to the submittal of the final permit application.

The operator and consultant acknowledged and will address the conditions outlined in the conditional use application with Hamiltonban Township throughout the permitting process.

MODULE 2

1. <u>Application for Individual NPDES Permit Associated with Mining Activities:</u> Revise item number 4, Operation Name, to include the correct operation/site name to be consistent with the Exhibits submitted with the application. Currently, item number 4 shows the operation/site name to be "Northern Tract" and the Exhibits show "Northern Tract Quarry". Also, see Module 1, comment number 1 and Module 8, comment number 3.

The consultant acknowledged and will revise the operation name to be consistent throughout the permit application with the permit submittal.

MODULE 6

1. <u>Module 6.2: Environmental Resource Map (e):</u> Identify which buildings are occupied dwellings on the Exhibit 6.2 Map. (77.410)

The consultant acknowledged and will identify each occupied dwelling on the Exhibit 6.2 Map with the permit submittal.

2. Module 6.2: Environmental Resource Map (s): Show clearly on the Exhibit 6.2 Map the location of the existing monitoring wells for the adjacent Pitts Quarry, SMP No. 01930302. (77.410)

The consultant acknowledged and will show clearly the location of the existing monitoring wells for the adjacent Pitts Quarry on the Exhibit 6.2 Map with the permit submittal.

MODULE 7

1. <u>Module 7.1 Stratigraphy (b):</u> Revise the geologic logs provided for each test hole to be reported on the Department's Geologic Log Drill Holes/Overburden Analysis Data form 5600-PM-BMP0403. (77.404)

The consultant is going to revise the existing geologic logs to include all of the information required on the Departments Geologic Log referenced above with the permit submittal.

2. <u>Module 7.1 Stratigraphy (b):</u> Provide the measured groundwater elevations for each test hole and piezometers on the 7.1(B) Geologic Logs. (77.404(1)(5))

The consultant and operator acknowledged and will look into what measurements they have to include with the permit submittal.

3. Module 7.1 Stratigraphy (b): Provide the 7.1(B) Geologic Logs for the following test holes shown on the Exhibit 6.2: Environmental Resources Map: ITB-2, ITB-4, ITB-7, ITB-9, ITB-11, ITB-13, ITB-15, ITB-17, ITB-19, ITB-20, ITB-20A, ITB-21, ITB-21A, ITB-22, ITB-23, ITB-25, ITB-27 through ITB-29, and ITB-31 through ITB-34. (77.404)

The operator will provide the Geologic Logs for the above referenced test holes if available with the permit submittal.

4. Module 7.1 Stratigraphy (b): Provide the 7.1(B) Geologic Logs for the following piezometers shown on the Exhibit 6.2 Environmental Resources Map: ITB-1-PZ, ITB-3-PZ, ITB-5-PZ, ITB-6-PZ, ITB-8-PZ, ITB-10-PZ, ITB-12-PZ, ITB-14-PZ, ITB-16-PZ, ITB-18-PZ, ITB-24-PZ, ITB-26-PZ, ITB-30-PZ, ITB-34A-PZ, ITB-36-PZ, and ITB-38-PZ. (77.404)

The consultant and operator acknowledged and will address with the permit submittal.

5. Module 7.1 Stratigraphy (b): Provide the 7.1(B) Geologic Log for the test hole identified as NT-13-07 on the Exhibit 6.2: Environmental Resources Map. (77.404)

The operator will provide the geologic log with the permit submittal.

6. Module 7.5 Mine Workings and Solid Waste Sites: A field review noted an abandoned underground copper mine entrance located within the proposed mining area. The copper mine entrance is located at N39° 46' 05.3", W77° 26' 25.9", approximately 100 feet to the east of test hole identified as NT-13-13. Add the abandoned mine to Surface and Underground Mines Table and key the location to Exhibits 6.2, 9, and 18. Also, see Module 9, comment number 17. (77.410(a)(13)

The consultant acknowledged and will include the location of the abandoned underground copper mine on the Exhibits 6.2, 9 and 18 maps with the permit submittal.

MODULE 8

1. <u>Module 8.1 Chemical Analysis</u>: Revise the Module 8.1(A) forms for the private water supplies identified as Shank and Holbrook to be consistent with the sample point identification numbers 16A16 and 07A16 shown on the Exhibit 6.2: Environmental Resources Map. (77.410(a)(5))

The consultant acknowledged and will revise the Module 8.1(A) forms to be consistent with the sample point identification numbers with the permit submittal.

2. <u>Module 8.1 Chemical Analysis:</u> Revise the Module 8.1(A) forms to check the monitoring report box for all proposed monitoring points. (77.532)

The consultant acknowledged and will revise the Module 8.1(A) forms for each monitoring point with the permit submittal.

3. <u>Module 8.1 Chemical Analysis:</u> Revise the operation name on the Module 8.1(A) forms to be consistent throughout the permit application. Currently, the operation name is "Northern Tract" and the Exhibits show "Northern Tract Quarry".

The consultant acknowledged and will revise the operation name to be consistent throughout the permit application with the permit submittal.

4. Module 8.2 Background Sampling and Monitoring (a): Provide the Module 8.1(A) form for the sample point identified as SP-2 shown on the Exhibit 6.2: Environmental Resources Map that lies within 1,000 feet of the proposed permit area. The background samples for SP-2 should be the same background samples that were provided for the adjacent SMP No. 01930302. (77.406)

The consultant acknowledged and will provide the Module 8.1(A) form for SP-2 with the permit submittal.

5. <u>Module 8.2 Background Sampling and Monitoring (a):</u> Provide two (2) monthly background samples that include measured flows for the following background sampling points: SS-Lower Seep, W-Wetland C, W-Wetland D, SS-Upper Seep, SS-PFO-Wetland, SS-DCNR Seep 1, and SS-DCNR Seep 2. (77.406(b)(1)(2)(3))

The consultant will clarify on the Module 8.1(A) forms for the above referenced background sample points the flow conditions observed during each sampling event with the permit submittal.

6. Module 8.2 Background Sampling and Monitoring (a)(3): Revise item 3 to include the existing spring/seep identified as SP-2. (77.406)

The consultant acknowledged and will revise item 3 to include SP-2 with the permit submittal.

7. Module 8.2 Background Sampling and Monitoring (a)(4): Revise item number 4 to include the impoundment identified as W-Pond 1 that is located within 1,000 feet to the Northwest of the proposed permit area. (77.406)

The consultant acknowledged and will revise item number 4 to include W-Pond 1 with the permit submittal.

8. Module 8.2 Background Sampling and Monitoring (a)(8): Provide background samples for the private water supplies that are within 1,000 feet of the proposed permit area for the following properties identified on the Exhibit 6.2: Environmental Resources Map: 19-A16, 95A-B16, 99-B16, 99A-B16, 95-B16, and 96-B16. (77.405)

The consultant will provide documentation (copies of certified letters) for properties that have denied background sampling and will provide the required background samples for the private water supplies that permitted background sampling to occur. The consultant mentioned that the structure on property 96-B16 is located outside the 1,000 feet barrier from the proposed permit area; however, they will confirm that the private water supply associated with the structure is also outside the 1,000 feet barrier with the permit submittal

9. Module 8.2 Background Sampling and Monitoring (a)(8): Provide a Module 8.1(a) form and update the Module 8.2(a)(8), Private Water Supply Information, for the following existing private water supplies shown on the Exhibit 6.2 Environmental Resources Map: 15A16, 95BB16, 97B16, and 60B16. The background samples for each point should be the same background samples that were provided for the adjacent SMP No. 01930302. (77.405)

The consultant acknowledged and will provide the Module 8.1(a) form with the required background samples and update the Module 8.2(a)(8) Private Water Supply Information with the permit submittal.

10. Module 8.2 Background Sampling and Monitoring (b): It is noted that the monitoring wells MW-9S and MW-9D will be abandoned during Phase 3 of the erosion and sediment control plan to accommodate the installation of NT Pond No. 2. The pond location should be relocated to preserve these monitoring wells. If the monitoring wells are unable to be preserved, the monitoring wells will be required to be replaced prior to their abandonment. The replacement wells must be developed within the same interval as MW-9S and MW-9D, and at a location that is structurally downgradient on the eastern section of the proposed permit area. Show the location of the replacement monitoring wells on the Exhibit 6.2 and 9 Maps. (77.532)

The consultant acknowledged and will revise the Exhibit 6.2 and 9 maps to show the proposed location for the replacement monitoring well with the permit submittal.

11. Module 8.2 Background Sampling and Monitoring (b): It is noted that the monitoring wells MW-13D will be abandoned during Phase 2 of the erosion and sediment control plan to accommodate the installation of NT Pond No. 1. The pond location should be relocated to preserve this monitoring well. If the monitoring well is unable to be preserved, a replacement monitoring well will be required to be developed prior to the abandonment of MW-13D. The replacement monitoring well must be developed within the same interval as MW-13D and located within 100 feet of MW-13D on the western section of the proposed permit area. Show the proposed location of the replacement monitoring well on the Exhibit 6.2 and 9 Maps. (77.532)

The consultant acknowledged and will revise the Exhibit 6.2 and 9 maps to show the proposed location for the replacement monitoring well with the permit submittal.

12. <u>Module 8.2 Background Sampling and Monitoring (b):</u> Provide six (6) monthly samples that include flow measurements for each sampling event for the monitoring point W-Pond 1. (77.406 9b)(1)(2))

The consultant acknowledged and stated that the W-Pond 1 was not discharging during the background sampling events. The consultant will revise the Module 8.1(A) for W-Pond 1 to clarify the field observations during each sampling event with the permit submittal.

13. Module 8.2 Background Sampling and Monitoring (b): Provide six (6) consecutive monthly static water elevation measurements from each monitoring well that coincide with six (6) monthly flow measurements from each surface water monitoring point. The additional sampling and groundwater measurements should include the month of August, September or October. (77.405(1))(77.406(b)(1)(2))

The consultant and operator acknowledged and will provide consecutive monthly static water elevation measurements for each monitoring well that coincide with monthly flow measurements from each surface monitoring point with the permit submittal. The permittee may submit a permit application with a minimum of three (3) consecutive monthly measurements that may include background data with static water elevations and flow measurements that have been collected on the same day.

14. Module 8.2 Background Sampling and Monitoring (b): Include the existing sample point identified as SS-4 into the proposed monitoring plan as a midstream monitoring point for Toms Creek. Install a staff gauge on the bridge located on Mt. Hope Road to allow for stream flow monitoring of Toms Creek and provide the required six (6) monthly background samples that include flow measurements using the staff gauge. (77.406(b)(1)(2)(3))

The consultant acknowledged and will include SS-4 into the proposed monitoring plan as a midstream monitoring point with the permit submittal.

Further discussion involved the installation of a weir(s) or staff gauge on Toms Creek for the permit submittal. The operator and consultant will coordinate with the Department to identify a suitable stream flow measurement solution.

15. Module 8.2 Background Sampling and Monitoring (b): Add the private water supply identified as 16A16 to the monitoring program and collect the required six (6) monthly background samples. Revise the Exhibit 6.2: Environmental Resource Map to include 16A16 as a monitoring point. (77.405)(77.532)(77.410(a)(6)

The operator proposed adding the monitoring well MW-10D in lieu of 16A16. The Department agreed, pending further information identifying the water bearing zone being monitored by MW-10D and how this compares to 16A16.

16. Module 8.2 Background Sampling and Monitoring (b)(6): Revise item 6 to include the private water supplies identified as 16A16, 07A16, and 15A16. (77.405)

The consultant acknowledged and will revise item 6 to include the private water supplies 16A16, 07A16 and 15A16 with the permit submittal. Pending the findings for Module 8, comment number 15, 16A16 may not be required to be added to item 6.

17. Module 8.2 Background and Monitoring (b): Include all monitoring wells in the monitoring program and revise the Exhibit 6.2: Environmental Resources Map to show the monitoring wells as monitoring points. The monitoring wells will be required to have quarterly static water elevations recorded with monthly static water elevation measurements taken as the quarry advances below the base flow of the Unnamed Tributaries to/and Toms Creek. In addition, one annual sample will be collected in conjunction with a static water elevation for quality analysis. (77.532)

The operator and consultant will propose a monitoring plan prior to the submittal of the full application. Exhibit 6.2: Environmental Resource Map will be revised accordingly with the permit submittal.

- 18. <u>Module 8.3 Groundwater Information</u>: In order to mine below the projected Northern Tract Quarry water table, which is unknown at this point, the following items must be addressed:
 - a. Provide a deep monitoring well at maximum cover within the proposed mining area that is drilled to an elevation of 695 feet and is developed within the same interval as the existing deep monitoring wells. Provide six (6) monthly background samples and groundwater measurements. (77.403) (77.405)

The consultant and operator acknowledged and will use existing data to support the potentiometric surface within the maximum cover mining area with the permit submittal.

b. Provide a shallow monitoring well at maximum cover within the proposed mining area that is developed from bedrock to the bottom elevation of MW-9S (973 feet). Provide six (6) monthly background samples and groundwater measurements. (77.403) (77.405)

The consultant and operator acknowledged and will use existing data to support the potentiometric surface within the maximum cover mining area with the permit submittal.

c. Apply the calibrated groundwater model for the proposed Northern Tract Quarry to the active Pitts Quarry now, and again when the Pitts Quarry reaches maximum mining depth to determine the validity of the model and input parameters. Compare the model predicted quarry pumping rates to actual pumping rates obtained from the Pitts Quarry for 2017 and provide these results with the full permit submittal. (77.403(b))

The consultant and operator acknowledged and will apply the calibrated groundwater model to the active Pitts Quarry to compare the model predicted results with the actual pumping rates observed at Pitts Quarry with the permit submittal.

d. Establish, through exploration, that the values used for the hydraulic conductivity and recharge in the groundwater model are representative of the site. (77.403) (77.405)

The consultant acknowledged and will clarify how the hydraulic conductivity and recharge values used are representative of the site with the permit submittal.

e. Identify the four core holes mentioned in the Groundwater Model Report and provide the measured groundwater elevations that were collected from each of the four core holes. (77.405)

The consultant acknowledged and will identify the four core holes and provide the measured groundwater elevations with the permit submittal.

f. Provide the calibration redistribution map for the calibrated groundwater model. (77.403(b))

The consultant will provide the calibration redistribution map for the calibrated groundwater model with the permit submittal.

g. Provide the normalized root mean square (RMS) percent error for the measured groundwater head calibration data from the groundwater model. (77.403(b))

The consultant acknowledged and will provide the normalized root mean square (RMS) percent error for the measured groundwater head calibration data from the groundwater model with the permit submittal.

h. Complete an aquifer test for the following monitoring wells: MW-1, MW-2, MW-3R, MW-4R, MW-5, MW-6, MW-7, and MW-8S. (77.403) (77.405)

The consultant acknowledged and will provide any existing or previously conducted aquifer tests for the adjacent Pitts Quarry and will conduct an aquifer test for the monitoring wells that have no previous data with the permit submittal.

i. Provide the aquifer test results in support of the hydraulic conductivity values for each monitoring well. (77.405(b))

The consultant acknowledged and will provide the aquifer test results with the permit submittal.

19. <u>Module 8.6 Hydrologic Assessment (a):</u> Provide the specific capacity test results for the private water supplies, Shank PWS (16A16) and Holbrook PWS (07A16). (77.532(b))

The consultant will provide the specific capacity test results with the permit submittal.

20. Module 8.6 Hydrologic Assessment (b): Provide the reported seepage rate (pumping rate) observed in the Pitts Quarry. A field review conducted on March 29 documented that the current pit elevation for Pitts Quarry was 990 feet on the seventh level of mining. It was also observed that the active pit had considerable pit water accumulation. (77.403) (77.532)

The operator acknowledged and is going to develop a method to determine the pumping rate from Pitts Quarry with the permit submittal.

MODULE 9

1. Module 9: Operations Map: Revise Note #1 on all phases of the operation map. If changes are made with access ramps and highwalls associated with developing the mine which impact the E & S designs, the operator will submit to the Department the revised, Exhibit 9, Operations Map (all phases) along with the E & S changes and design calculations for approval. (77.454 (6))

The operator will include the revised Note #1 with the permit submittal.

2. <u>Module 9: Operations Map (b):</u> Revise the proposed permit area to include the mining shown southwest of the permit area, between the proposed permit area and the adjacent Pitts Quarry, SMP No. 01930302. (77.454 (a)(1))

The consultant acknowledged and will revise the permit area to include the mining shown between the proposed permit and the adjacent Pitts Quarry with the permit submittal.

3. Module 9: Operations Map: Revise Note #2 on all phases of the operations map. If NT Ponds No. 1 and/or No. 2 would need to be breached due to the quarry footprint advancement, the Operator will not breach any NT Ponds without written approval from the Department. Breaching these ponds may impact the adjacent Tom's Creek, which is classified as a High-Quality Stream. (77.454 (6))

The operator will include the revised Note #2 with the permit submittal.

4. <u>Module 9: Operations Map (c):</u> Show the required 100-foot stream barrier in the permit area parallel to unnamed tributary to Tom's Creek along Iron Springs Road and parallel to Tom's Creek. A variance is required to impact any area within the 100-foot stream barrier. (77.126)

The operator will include the 100 feet stream barrier with the permit submittal.

5. Module 9: Operations Map (e): Show the required 300-foot occupied dwelling barriers, unless released by the owner thereof. Several houses along Iron Springs Road may impact the permit area with the 300 feet barrier requirement. Also, the dwelling near Monitoring Wells 14S and 14D will need to show the 300 feet barrier if the dwelling is occupied. Also, please differentiate between an occupied dwelling and an unoccupied structure on the operations map. Presently, all structures look the same. (77.126)

The operator will include the 300 feet barrier for an occupied dwelling with the permit submittal.

6. Module 9: Operations Map (f): Show the 100-foot barrier of the outside right-of-way line of a public highway. The 100 foot barriers along Iron Springs Road and Gum Springs Road may impact the permit area. (77.126)

The operator will include the 100 feet barrier for the public highway with the permit submittal.

7. <u>Module 9: Operations Map (f):</u> Provide the names of all the public roads shown within 1000 feet of the permit area. Presently Mt. Hope Road, Pete's Lane and Emory Lane are not labeled on the operations map. (77.410)

The operator will include the names of all the public roads shown within 1,000 feet of the permit area with the permit submittal.

8. Module 9: Operations Map (f): Include in the legend the symbol for the overhead electrical lines (OHE) shown along the haul road gong to the Pitts Quarry on the operations map. Furthermore, the operator needs to show the proposed location for the overhead electrical lines needed for NT Pond Pumps #1 and #2. (77.410)

The operator will include the symbol for the overhead electrical lines in the legend with the permit submittal.

9. Module 9: Operations Map (g): Show the gas line and company name within 1,000 feet of the permit area. Presently the operations map is only showing the gas line in the permit area and the gas line company is not labeled. The gas company name should also be shown on the Pitts Quarry gas line since the gas line is shown on the operations map. (77.410)

The operator will include the gas line and company name within 1,000 feet of the permit area with the permit submittal.

10. Module 9: Operations Map (i): Clarify why the Pitts Quarry Operations Map shows the final pit elevation at 840 feet, but the proposed operations map for the Northern Tract Quarry shows the Pitts Quarry final pit elevation at 790 feet. Please provide the approval for the Pitts Quarry final pit elevation to be lowered to 790 feet since Part C, Noncoal Authorization to Mine, notes the Pitts Quarry shall not extend the pit floor elevation beyond 840 feet MSL. (77.410)

The operator noted this was a typing mistake and it will be corrected with the permit submittal.

11. <u>Module 9: Operations Map (j):</u> Show the old copper mine entrance and the length of the copper mine on the operations maps via dotted lines. Site visit observed the old mine opening and the underground mine must be shown on all exhibits. (77.410)

The operator noted the old underground copper mine will be shown on the operation map with the permit submittal.

12. <u>Module 9: Operations Map (m):</u> Show bench elevations for each Phase Operations Map. Presently, the Phase Operations Maps do not show benches or highwalls being developed. (77.410)

The operator will not include the benches or highwalls with the Phase Operation Maps since the Phase Operation Maps are for E & S Controls only. Also, the mining plan may vary too much to provide an accurate bench elevation during each phase of mining.

13. Module 9: Operations Map (o): Show a collection ditch up slope of Sediment Ponds NT Pond No. 1 and NT Pond No. 2. The run off from the pond drainage area should be directed to the farthest distance from the pond discharge location to allow the maximum amount of settling time. (77.454 (6))

The operator will show collection ditches up slope of the proposed sediment ponds with the permit submittal.

14. Module 9: Operations Map (p): Label the culverts on the operations map and include the size & type of culvert to be installed. Please clarify on the operations map for Phase 1 if culverts will be required to allow equipment to cross the proposed collection ditches C-1 or C-2, since the operations map shows the ditches on the inside portion of the access road with no entrances to the working pit area. (77.454 (6))

The operator will label all culverts on the operation map and will show culverts for collection ditches C-1 and C-2, if necessary, with the permit submittal.

15. Module 9: Operations Map (p): Show and label the pump locations for Sediment Ponds NT Pond No. 1 and NT Pond No. 2 on the final operations map. Also, show and label the final collection ditches on the operations map. Presently, the Operation Phase maps show the pump locations, but the 1" = 400' final operations map does not show the pump or ditch locations. A final operations map with a scale of 1" = 200' is necessary and will help the operator's foremen to make sure the E & S controls are located properly on the permit area. (77.454 (6))

The operator will show and label the pump locations for the sediment ponds and will submit an operation map with a 1" = 200' scale with the permit submittal.

16. Module 9: Operations Map (t): Show the access/haul road clearly on the operations map. Presently, the access/haul road are not clearly shown from the Pitts Quarry to the Northern Tract Quarry. (77.410) (77.631)

The operator will show all access/haul roads clearly on the operation map from the Pitts Quarry to the Northern Tract Quarry with the permit submittal.

17. <u>Module 9: Operations Map (s):</u> Show the topsoil, spoil and berm areas. These items are checked on the Module 9: Operations Map item list, but not shown on the operations map. (77.410)

The operator will show the top soil, spoil and berm areas with the permit submittal.

18. Module 9: Operations Map (u,v): Show the processing facilities, refuse disposal areas on the operations map. This item was checked on the Module 9: Operations Map item list, but not shown on the operations map. (77.410)

The operator will uncheck the processing, refuse disposal areas on the Module 9: Operation Map item list with the permit submittal.

MODULE 10

1. Module 10.1 Equipment and Operation Plan: Include in the 10.1 narrative final paragraph; "Prior to NT Pond Nos. 1 and/or 2 removal, the operator will submit a revised E & S plan showing the proposed E & S controls for the pond removals since it is critical to prevent any erosion or drainage from the mining area from going into the High-Quality Tom's Creek and the Unnamed Tributary to Tom's Creek, located near Iron Springs Road. The NPDES Permit may have to be revised". (77.527) (77.531)

The operator will include the revision in the narrative with the permit submittal.

2. <u>Module 10.6 Reclamation Timetable:</u> Provide an estimated timetable for each phase and details for the bench elevations for each phase. (77.456)

The operator will include a general estimate for the reclamation timetable. During the meeting, the operator noted that due to the quarry production being tied to the supply and demand of the home construction industry, it was very difficult to provide a time table.

3. <u>Module 10.11: Underground Mines:</u> Revise the response to include a description in regards to the abandoned underground copper mine entrance located within the proposed mining area. (77.463)

The consultant will include a description in regards to the abandoned underground copper mine with the permit submittal.

MODULE 12

1. <u>Module 12.1 Diversion Controls:</u> Provide the diversion ditch designs for the diversion ditches shown on the operations map for Phases 2 and 3. The ditch designs are required to make sure the ditches are sized properly for the drainage area. Presently, no diversion ditch designs were submitted. (77.524) & (Technical Guidance #563-0300-101)

The operator will provide the diversion ditch designs with the permit submittal.

2. <u>Module 12.2 E & S Controls:</u> Provide all submitted sheets with concurrent page numbers. Presently, Modules 12 &13 have several sheets without page numbers, making it difficult to reference these pages if comments are required or if they need to be replaced with revised sheets. (77.126)

The operator will number all pages with the permit submittal.

Module 12.2 E & S Controls: Provide the starting elevation and stations on the collection ditch data sheets. Presently, the collection ditch data sheets refer to the ditch profile; however, the ditch profile is not to scale and does not provide the exact location for each ditch segment or slope change.
 (77.525) & (Technical Guidance #563-0300-101)

The operator will provide the starting elevation and stations on the collection ditch data sheets with the permit submittal.

4. Module 12.2 E & S Controls: Clarify the channel bed slopes for collection ditches CD-3, CD-4, and CD-5. Presently, the first ditch segment channel bed slope does not match the slope provided by the ditch profile. For example, the collection ditch data sheet's first segment for CD-3 is noting a 2% slope; however, the ditch profile is showing an 8.9% slope. The operations map contour elevations show the ditch profile to be more accurate. (77.525) & (Technical Guidance #563-0300-101)

The operator will clarify the channel bed slopes for the collection ditches noted above with the permit submittal.

5. Module 12.2 E & S Controls: Provide the stilling basin design calculations and the standard construction detail for using filter socks for a stilling basin design. The E & S Pollution Control Program Manual only has a stilling basin design for rock and not filter socks. The E & S Pollution Control Program Manual notes sediment traps constructed with filter socks, photodegradable and biodegradable socks shall not be used for more than one (1) year. Please note the length of time and type of filter socks that will be used for the stilling basin.

(77.525) (Technical Guidance #363-2134-008)

The operator will address the above concerns with the permit submittal.

6. Module 12.2 E & S Controls: Include in the full application, either the culvert crossing design or the alternate Texas crossing design, but not both. Presently, the operations map and phases are showing culvert crossings; however, if the operator wishes to install the Texas crossing design, this should be noted on the operations map instead of the culvert crossings.

(77.525) & (Technical Guidance #563-0300-101)

The operator will only ask for the alternate crossings at locations which have minimal traffic. Culvert designs will be noted for much of the ditch or road crossings.

MODULE 13

- Module 13.3 Dams and Impoundments: Clarify the following comments for Sediment Ponds NT No. 1 and NT No. 2 designs and Pond Certification sheets. (77.527) (77.531) & (Technical Guidance #563-0300-101) (Technical Guidance #363-2134-008)
 - a. Use the Design Storm Event for the emergency spillway design as noted in the Erosion and Sediment Pollution Control Program Manual, Design Criteria Summary Item #22; an acceptable alternative is to provide a discharge capacity equal to the 100-year, 24-hour storm event, assuming maximum runoff conditions, with 12 inches of freeboard. Please design the Peak Discharge and the Emergency Spillway Capacity on the Pond Certification sheet for both NT Nos. 1 & 2 for the 100-year, 24-hour storm event. Presently, the Pond Certification sheets do not provide this information.

After discussion about the emergency spillway design, the Department checked with Doug Caylor, Civil Engineer Manager Hydr. for the Bureau of Waterways to obtain a final solution for the emergency spillway design. The Department is requiring the operator to meet the Pond Code 378 and Sediment Basin Code 350 as noted in the Engineering Manual for Mining Operations

b. Address if both sediment ponds will require liners since the ponds are being excavated in rock that may not hold the storm water.

The operator and consultant will evaluate the rock structure to determine if the pond will require liners.

c. On the Exhibit 12, Initial Site Development-Phase 3 Watersheds, Drawing No. 26; the operator is showing two separate sediment ponds. Please provide the pond designs and pond certification sheets for these two ponds. It is critical that the ponds meet the Antidegradation Best Available Combination of Technologies (ABACT) designs, which are required for sediment pond designs on special protection watersheds. Each pond must have a separate NPDES point.

The operator and consultant will further study the E & S control time table to determine if one or two ponds will be required.

2. Module 13.6 Removal: Add in the narrative: "The operator will submit an E & S revision for approval to the Department prior to removing NT Pond No. 1 and/or NT Pond No. 2. The E & S revision will show that no storm water from the mining area or erosion will be directed to Tom's Creek or unnamed tributary to Tom's Creek, located next to Iron Springs Road". (77.527) (77.531) & (Technical Guidance #563-0300-101) (Technical Guidance #363-2134-008)

The operator will include the revised narrative with the permit submittal.

3. Module 13.3 Dams and Impoundments: Describe in the narrative how the storm water run-off pumped from the Northern Tract Quarry will not impact the Chairman Plant's Lower Mill Ponds, considering the additional drainage area going to the ponds. Please provide the upstream and downstream flow measurements from Miney Branch along with the Lower Mill Pond #3 discharge and note these sample points will be monitored monthly and after any major precipitation event. This information will be submitted to the Department monthly. The operator should construct weirs or flumes to obtain accurate flow readings for Miney Branch. This may require coordination with the US Army Corp of Engineers to determine if a federal permit is required for the installation of a weir or flume. (77.527) (77.531) & (Technical Guidance #563-0300-101) (Technical Guidance #363-2134-008)

The operator will include the revised narrative with the permit submittal. The operator will look at constructing weirs at both the upstream and downstream monitoring locations on Miney Branch for flow monitoring.

MODULE 14

1. <u>Module 14: Streams/Wetlands:</u> Provide a detailed hydrologic study evaluating potential impacts to the quality or quantity of Toms Creek or Unnamed Tributaries to Toms Creek and associated wetlands. This should be noted in the Module 14 narrative. (105.17) (Technical Guidance #563-0300-101) (Technical Guidance #363-2134-008) (Technical Guidance #391-0300-002)

The operator will address the possible wetland impacts with the permit submittal since the hydrologic study has been finalized.

MODULE 18

1. Exhibit 18 – Land Use and Reclamation Map: The pre-application shows two options for final reclamation for the proposed permit. The operator must choose only one of the reclamation plans for the complete permit application submittal. Also, see Module 19 and Module 20, comment number 1. (77.462)

The operator may discuss different reclamation scenarios; however, one reclamation plan must be selected and bonded. If more than one reclamation plan is discussed, the plan requiring the most bond will determine the amount of bond required.

MODULE 19

1. Module 19.1 Land Use (a): Revise the Exhibit 18: Land Use and Reclamation Map to show and key the current land use of forestland that covers the majority of the proposed permit area. (77.409(1))

The consultant will revise the Exhibit 18: Land Use and Reclamation Map to show the current land use of forestland with the permit submittal.

MODULE 20

1. Module 20: Post Mining Land Use and Reclamation: Currently the response in Module 20 is requesting approval of two options for final reclamation of the proposed permit. The operator must choose only one of the reclamation plans and revise Module 20 accordingly for the complete permit application submittal. Also, see Module 18, comment number 1. (77.462)

The operator may discuss different reclamation scenarios; however, one reclamation plan must be selected and bonded. If more than one reclamation plan is discussed, the plan requiring the most bond will determine the amount of bond required.

MODULE 24

1. Anti-Degradation Supplement for Mining Permits: Section 1: Part D: Use of Non-Discharge Alternatives: The operator checked #2: Non-discharge alternatives use will not account for the entire discharge. A point source discharge is anticipated: (Provide justification in Section 1.C. and chose a. or b. below). The operator has checked both a. and b.; however, only one of these options should be checked. If a Social Economic Justification and Water Use Demonstration (SEJ) is selected, this should be submitted prior to the submittal of the full application, as the full application cannot be submitted until the SEJ is approved by the Department. (Technical Guidance #391-0300-002)

If the operator wishes to request a SEJ for this permit, the review and approval process for the SEJ must happen prior to the submittal of the full permit application. An evaluation of the expected discharge water quality can then be part of the full permit application.

Please address these comments and submit a complete permit application within one (1) year of the date of this letter. If a complete permit application is not submitted within one (1) year of the date of this letter, the application will not qualify for Permit Decision Guarantee. A copy of this letter, in addition to a narrative addressing each correction item, must be attached to all copies of the surface mining permit application. If these items are not addressed in the application, your application will be returned as incomplete.

If you have any questions, please contact me at 814.472.1900.

Sincerery

♣~Chad Paronish

Geologic Specialist

Bureau of District Mining Operations

cc:

Daniel Sammarco, P.E., District Mining Manager — via email Rock Martin, P.G., Chief, Technical Services Section — via email Dave Thomas, Mine Inspector Supervisor — via email Thomas A. Nalisnick, P.E., Mining Engineer — via email Dan Welte, Mine Conservation Inspector — via email Jeff Painter, P.G., PA Game Commission — via email Debby Nizer, Army Corps of Engineers — via email Steve McDougal, Bureau of Historic Preservation — via email Robert M. Shursko, P.E., D'Appolonia — via email Laura Berra, P.E., Skelly and Loy — via email File (Pre-Application No. 01170301)

CP/cam