

“VIA EMAIL”

March 6, 2018

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

Re: Specialty Granules LLC
“Northern Tract Quarry”
Permit No.: 01180301
Township: Hamiltonban
County: Adams

Dear Mr. McClure:

The Department of Environmental Protection (DEP) has reviewed the above-referenced application and has identified the following technical deficiencies. The deficiencies are based on applicable laws and regulations, and the guidance sets forth the Department’s preferred means of satisfying the applicable regulatory requirements. This letter is being sent via email only and a hard copy will not follow.

MODULE 1

1. Section G. Land Use Information: Provide the Land Use Letter from Hamiltonban Township in response to your Act 67, 68, and 127 Notification Letter dated December 21, 2017.
2. Section C. Site Information: Revise the acres shown in the Mining Area to include the rock/mineral removal of the acreage shown outside the proposed permit area located between the proposed permit area and the adjacent Pitts Quarry, SMP No. 01930302. If the operator chooses to include this mining area in a revision to Pitts Quarry, then the mining area will be required to be removed from the proposed Northern Tract Quarry application since it is not within the proposed permit area. Also, see Module 10 comment number 1. (77.452)
3. Section H. Additional Related Information: Provide the proof of publication when received. (77.121)

MODULE 4

1. Module 4.3 Cultural or Historic Resources: Provide a copy of the Phase I archaeological report completed for the proposed Northern Tract Quarry to both the Department and PA State Historic Preservation Office (PA SHPO). As per the correspondence letter received from the PA SHPO dated February 27, 2018, the PA SHPO states that in a correspondence letter provided to Specialty Granules, LLC on August 11, 2017, a Phase I archaeological survey should be conducted to locate potentially significant resources. The PA SHPO requested a copy of the Phase I archaeological report to complete their review of the proposed Northern Tract Quarry. (77.126)

MODULE 8

1. Module 8.2 Background Sampling and Monitoring (a)(8): Provide two background samples for the private water supply identified as 95BB16. (77.405)
2. Module 8.2 Background Sampling and Monitoring (a)(8): Provide two background samples for the private water supply identified as 97B16. If the well has been abandoned, provide documentation from the property owner that the 97B16 has been abandoned. (77.405)
3. Module 8.2 Background Sampling and Monitoring (b): Provide an additional two (2) consecutive monthly static water elevation measurements from each monitoring well that coincide with two (2) monthly flow measurements from each surface water monitoring point. (77.405(1)) (77.406(b)(1)(2))
4. Module 8.2 Background Sampling and Monitoring (b): Provide two (2) additional background samples for the monitoring point SS-4. (77.406(b)(1)(2)(3))
5. Module 8.2 Background Sampling and Monitoring (b): Provide two (2) additional background samples for the private water supply 15A16. (77.405)
6. Module 8.2 Background Sampling and Monitoring (b): Include monitoring well MW-14D in the monitoring program and revise the Exhibit 6.2: Environmental Resource Map to show MW-14D as a monitoring point. As mentioned in your response letter received with the application, MW-14D was not included due to the proximity to 15A16. Although MW-14D is within close proximity to 15A16, the monitoring well is developed to a bottom elevation of 694 feet (ft) and represents the lowest level of mining. 15A16 is only developed to an elevation of 993 ft and does not represent the lowest proposed level of mining of 740 ft. In addition, the pump test results presented in the Groundwater Model Report show that the hydraulic conductivity for MW-14D was 0.6384 ft/day (highest of the 9 monitoring wells) suggesting a higher permeability locally. (77.457(a)(3)) (77.532)

7. Module 8.3 Groundwater Information: Provide a copy of the raw flow monitoring data from June 6, 2017 to August 29, 2017 for the dewatering of Pitts Quarry. (77.403(b)) (77.532)
8. Module 8.3 Groundwater Information: Revise the Groundwater Model Report on pages 7 and 14 to show the range for the underlying bedrock hydraulic conductivity values from 0.0047 to 0.6384 ft./day. Currently the hydraulic conductivity range is shown from 0.0047 to 0.1591 ft/day and does not include the highest reported hydraulic conductivity of 0.6384 ft./day from MW-14D. (77.403(b))
9. Module 8.3 Groundwater Information: Revise the Groundwater Model Report, Table 10- Total Stream and Wetland Losses (Table 10) to use a calculated percentage of the low and high flows observed at each stream reach that consider the drainage area for each of the following wetland and seep areas: Wetland Seep Area (1, 3, and 4), Delineated Wetland (A, C, D and E) that lie within the zone of influence of the quarry (Figure 32: Site Area Simulated 12th Level (740 FT.-ASML Drawdown)). For example, the low and high flow volumes used for Wetland D assume 60 % of Stream Reach C's surface water flow (39 gpm and 198 gpm) due to the higher topographic elevation of the wetland. A review of this percentage using streamstats shows that the overall drainage area for Stream Reach C is approximately 0.83 mi² and the drainage area for Wetland D is approximately 0.03 mi² pre-mining and 0.006 mi² post-mining. Using the pre-mining drainage area, Wetland D represents approximately 3.6 percent of the drainage area to Stream Reach C. This would then result in a low flow of 2.3 gpm and a high flow of 11.9 gpm. (77.403(b)) (77.406)
10. Module 8.3 Groundwater Information: Revise the Groundwater Model Report, Table 10 to compare total flow loss (base flow and overland flow) from quarry development to total stream and wetland flow volumes. Currently, Table 10 only shows the base flow loss to the streams and wetlands and does not include overland flow loss from the affected drainage area of the proposed Northern Tract Quarry. (77.403(b))
11. Module 8.3 Groundwater Information: In your response letter received with the application, you provided aquifer testing results for the following monitoring wells MW-3R, MW-4R, MW-5 and MW-7 to partially address Module 8 comment number 18 (h) and (i). However, aquifer testing results were not provided for MW-1, MW-2 and MW-8S. Since MW-8S is a perimeter monitoring well for the proposed Northern Tract Quarry, please complete an aquifer test for MW-8S and provide the test results. (77.403) (77.405)
12. Module 8.6 Hydrologic Assessment (a): Provide the field record for the specific capacity test completed for the private water supplies 16A16 and 07A16 that show the measured drawdown and recovery, pumping rate and corresponding time intervals. (77.532(b)) (77.532)

MODULE 10

1. Module 10- Bond Calculation Summary-Noncoal Consolidated: As per Module 1 comment number 2, revise the bond calculation summary to include the mining and support area noted as being outside the proposed Northern Tract Quarry permit area. (77.452) (77.193(b) (77.202)

MODULE 13

1. Module 13.3 Dams and Impoundments: Since the operator has decided to design the sediment pond for a 100-year, 24-hour storm event, the operator must design the Peak Discharge and the Emergency Spillway Capacity on the Pond Certification sheet and in the pond design calculations for Sediment Ponds NT No 1 & 2 for the 100-year, 24-hour storm event. Presently, the Pond Certification sheets and design calculations do not provide this information. (77:527) (77:531) & (Technical Guidance #563-0300-101) (Technical Guidance #363-2134-008)

MODULE 14

1. Module 14.4 Mitigation/Replacement: Based on the information provided, no direct impacts to five delineated wetlands (A-E) along the proposed eastern permit boundary are anticipated. Based on hydrologic modeling potential indirect impacts to Wetland D may occur. The operator proposes vegetative bi-annual (twice per year) monitoring of Wetland D during mining activities. The operator proposes that a mitigation plan will be developed should any impacts be observed. The monitoring plan should include all identified wetlands and plans for any necessary mitigation must adequately address the impact to or loss of all wetlands resources due to the proposed mining operations. If Wetland D is impacted by mining, the operator must conduct vegetative bi-annual (twice per year) monitoring for Wetlands A and C since these wetlands are on the same side of unnamed tributary to Toms Creek. This should be noted in the Module 14.4 narrative. Presently, the Module 14.4a)1) narrative does not state that the operator proposes bi-annual (twice per year) vegetative monitoring, however this was noted in your response to the Pre-Application Technical Review letter dated January 4, 2018. (105.17) (Technical Guidance #563-0300-101) (Technical Guidance #363-2134-008)

MODULE 23

1. Module 23.3 Permanent Cover: Revise the seed mixtures A and D to remove Johnstone Fescue from the proposed permanent cover seed mixtures. As per correspondence from the Pennsylvania Game Commission (PGC) dated February 12, 2018, studies have shown fescue (*Fetuca sp.*) to be toxic to several wildlife species. In addition, because of its ability to out-compete other grass species, it could create a sterile fescue environment. We emphasize that, while Exhibit 18 does not include a list of seed mixtures containing any fescue, replacing the fescue species with a combination of big and little bluestem (*Andropogon gerardi* and *Andropogon virginicus*, respectively), indian grass (*Sorghastrum nutans*) and switchgrass (*Panicum virgatum*) should either of these mixtures be used is recommended.

You must submit a response fully addressing each of the technical deficiencies set forth above within thirty (30) business days or DEP may deny the application.

If you believe that any of the stated deficiencies are not significant, instead of submitting a response to that deficiency, you have the option of asking DEP to make a decision based on the information with regard to the subject matter of that deficiency that you have already made available. If you choose this option with regard to any deficiency, you should explain and justify how your current submission satisfies that deficiency. Please keep in mind that if you fail to respond, your application may be denied.

Should you have any questions regarding the identified deficiencies, please contact me at 814.472.1900 and refer to SMP No. 01180301, Auth No. 1213260 & 1213264, to discuss your concerns or schedule a meeting. The meeting must be scheduled within the thirty (30) day period allotted for your reply, unless otherwise extended by DEP. You may also follow your application through the review process via eFACTS on the Web at:
<http://www.ahs.dep.pa.gov/eFACTSWeb/default.aspx/default.aspx>.

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

Sincerely,



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
Kevin Moore, Specialty Granules, LLC- via email
File

CP:mrw