

VIA EMAIL

January 24, 2020

Matthew S. McClure, Executive Director Operations
Specialty Granules LLC
13424 Pennsylvania Avenue
Suite 303
Hagerstown, MD 21742

Re: Technical Deficiency Letter
Specialty Granules LLC
"Northern Tract Quarry"
Permit No.: 01180301
NPDES No.: PA0279617
Township: Hamiltonban
County: Adams

Mr. McClure:

The Pennsylvania Department of Environmental Protection (DEP) has reviewed your response dated December 12, 2019 to DEP's September 30, 2019 technical deficiency letter for the above referenced Northern Tract Quarry Noncoal and NPDES permit applications. DEP has also reviewed your January 17, 2020 email providing the transmission electron microscopy (TEM) analyses of the Northern Tract Quarry core samples. As you are aware, a meeting has been scheduled with Specialty Granules LLC (SGI) to discuss these items on Thursday, January 30, 2020, at 10:30 AM at DEP's Southcentral Regional Office. Among other topics at the meeting, DEP expects to discuss a time frame for SGI's response to the items noted below, in order to facilitate expeditious final action on the application. Depending on our discussions, further review of the information provided to date by SGI, and SGI's responses to these technical deficiency items, DEP will evaluate the need for any further technical deficiency letters.

Technical Deficiency Items:

1. Please confirm the fiber lengths and aspect ratios that were counted and reported for the rock core sample TEM analysis. Proposed fiber length and aspect ratios were described in the TEM Asbestos Analytical Procedure for Bulk Samples document. Also confirm whether cleavage fragments meeting these length and aspect ratio parameters were counted and reported.

2. Please provide a field map showing locations, dates, and a description of the naturally occurring asbestos (NOA) that has been confirmed through rock core sampling for the proposed Northern Tract Quarry and the existing Pitts Quarry according to the Suspect Mineral Identification and Management Protocol section 1.1 – Initial field mapping and description of primary structural/alteration features.
3. Please provide maps of both the Pitts Quarry and the Northern Tract showing sample locations for all sample types (industrial hygiene, perimeter air, processed materials and products).
4. Please provide the designated disposition areas for any suspect mineral that may be encountered at the Northern Tract as outlined in the Suspect Mineral Identification and Management Protocol Section 2.4 – Disposition of suspect materials. The disposition location must be clearly shown on the Exhibit 9: Operations Map. In addition, provide the location of any suspect mineral (including NOA) that has been encountered and disposed of for Pitts Quarry.
5. Please explain why SGI is counting cleavage fragments as “non asbestos” in its 1/17/2020 submission to DEP. Page 93 of the 1/17/2020 submission, for example, demonstrates that cleavage fragments are not being reported as asbestos, while materials that appear to have a similar chemical composition are being reported as asbestos fibers. Please explain this difference.
6. Please provide a narrative interpretation of the public health implications of the TEM results submitted on 1/17/20, as well as their geographic distribution, and their implications for the proposed mining plan.
7. Core and Air Samples: Please provide lab sheets signed off by the microscopist for all asbestos TEM analyses.
8. Core and Air Samples: Due to the importance of experience and consistency in fiber counting, please provide documentation demonstrating that any microscopists who will be conducting any TEM asbestos analyses have experience or training for that task.
9. Air Sampling: Please provide documentation of the following information regarding field blanks to verify contamination has not occurred: (i) Location of field blanks, (ii) Where and when blanks were opened and closed.
10. Please make revisions to Appendix 7.2—Suspect Minerals Identification and Management Guide, and provide them to DEP as follows:
 - (i) Section 1.2.1: Revise the definition of “Geologist” to mean: A Pennsylvania Licensed Professional Geologist (P.G.).
 - (ii) Section 1.4.2: Revise to ‘The “all clear” signal must be determined and given by the Geologist (P.G.).’

- (iii) Section 1.4.3: Please state SGI's rationale for including the carbonaceous material identification step of the Suspect Material Identification/Confirmation, since this does not appear relevant to asbestos.
11. In regard to Attachment E—Asbestos Air Monitoring and Mitigation Plan at Specialty Granules LLC of the Technical Deficiency Response dated December 11, 2019, please revise this document by adding the following to Section 6.0—Analytical Methods, Duplicate Samples: “Duplicate samples will be provided to DEP”, and provide the revised document to DEP.
 12. Please confirm that the proposed weather monitoring station will follow EPA Meteorological Monitoring Guidance Document No. 454 R99-005.
 13. Please explain more clearly why any materials were redacted from any attachments to the Technical Deficiency Response dated December 11, 2019.
 14. Please provide the results of the most recent MSHA sampling at the facility, as well as SGI's interpretation of their significance from a public health perspective.
 15. Please provide any information/sampling/studies if available that SGI has regarding airborne silica concentrations at or beyond the boundaries of the existing facility.
 16. Please provide a demonstration that airborne silica beyond the boundaries of the existing facility will not result in undue risk to public health.
 17. Technical Deficiency Response: Attachment G: Page 2-5: Please provide SGI's assessment of the public health significance of the numbers in the following columns:
 - TWA Fibers/cc (PCM)
 - Peak Fibers/cc (PCM)
 - Fibers/cc TEM
 - Tremolite-actinolite fibers/cm³
 - Respirable Dust (mg/m³)
 - Crystalline Quartz (respirable) mg/m³
 18. Technical Deficiency Response: Attachment G: Pages 2-5: Does the lack of a number in any of the above columns imply that the parameter was tested and not found, or does it rather imply that that particular sample was not tested for that pollutant?

19. Technical Deficiency Response: Attachment G: Pages 19-308 showed the actual numeric asbestos fiber counts on certain pages. Please provide SGI's assessment of the public health significance of these numbers, such as Pages 69-74, which list 22.5 fibers of amphibole found.
20. Technical Deficiency Response: Attachment G: Please explain why some of the analysis results show "half-fibers" and explain how a "half fiber" would differ from a whole fiber.
21. Technical Deficiency Response: Attachment H: Because the sampling conducted by SGI was limited to what appears to be two grab samples and may not accurately reflect average or normal conditions at the facility, please provide information relating to facility operations during the sampling periods reflected in Attachment H.
22. Technical Deficiency Response: Regarding the data reviewed in Attachment H there appears to be insufficient data to make an evaluation that the data presented represents a "normal" day or that particulate matter that may migrate off site may or may not contain asbestos fibers. Please provide more samples across a variety of operational, meteorological and temporal conditions to complete this analysis.
23. Technical Deficiency Response: Attachment I - Processed Material and Product Sampling Results: The organization of this 488 page document is unclear. Please provide a detailed list of the contents, plus an executive summary providing SGI's assessment of the public health significance of the various documents.
24. Technical Deficiency Response: Attachment K - SGI Respiratory Protection Policy (6-25-2019) USE Active01 304100195 1: Page 8: Please explain what criteria were used by SGI to determine which areas of the facility are Respirator Required Areas.
25. Technical Deficiency Response: Attachment L - Industrial Hygiene Sampling Results (Respirable Dust)_USE_Active01_304100317_1: Table on Pages 2-5 (2000-2009): Please provide fuller explanations of the meanings of the column headings and the public health significance of the measured results, including whether any of the measured values were exceedances of either OSHA, MSHA, IRIS or any other applicable standards, and why this is or is not a concern.
26. Technical Deficiency Response: Attachment L: Table on Pages 6-11 (2010-2019): Please provide fuller explanations of the meanings of the column headings and the public health significance of the measured results, including whether any of measured values were exceedances of either OSHA, MSHA, IRIS or any other applicable standards, and why this is or is not a concern.
27. Technical Deficiency Response: Attachment L: Table on Page 19: Please provide fuller explanations of the meanings of the column headings and the public health significance of the measured results, including whether any of measured values were exceedances of either OSHA, MSHA, IRIS or any other applicable standards, and why this is or is not a concern.

28. Attachment M - Product Testing for Properties and Constituents (10-07-2019) _ USE _ Active01_ 30410029.PDF: This entire document is marked as Company Confidential. Please confirm whether SGI truly intends to claim this as confidential, and if so, please provide the statutory basis for the confidentiality claim, as well as a redacted version of the document suitable for public release, with a cover letter and chart listing each redaction by page number with the statutory justification of each item.
29. Please obtain and analyze split samples for NOA using EPA Method 100.1 from all intakes of water that are used for processing and/or dust suppression. Please include a description of the source and the sampling location that the sample was obtained including but not limited to the "J-stand" and water pumped from Pond #3 of the Lower Mill Ponds to the Charmian Facility.
30. Please provide a response for the following written comment from the public:

The proposed site of this new quarry has to be the poster child of where NOT to put a quarry. Would PADEP even consider this application if it were not for the existing quarry behind it? The tract is surrounded on three sides by HQ tributaries and stream, wetlands exist on both sides, and it is situated within a residential area, across from a State Forest. The only antidegradation option which prevents damage to an iconic stream (Toms Creek is well known and loved because of its trout fishing and its long stretch down through to Lake May and the Carroll Valley Community Park), is the first: moving the site to a different location. I was mistaken in my estimate of how much land SGI currently owns. It is not 1400 acres, but there is plenty of room within its current boundaries, and ISP/SGI has deed recorded options to mine on adjacent properties. SGI even admits that if it were to move some of its infrastructure that it could expand into those areas. And SGI has deed recorded mining rights to an 130 acres parcel owned by Elizabeth Chase, continuous with the Pitts quarry. (See Appendix A.)

31. With regard to items 6, 14, 17, 19, 23, 25, 26, and 27, it might also be helpful in evaluating the public health implications of the data if SGI were to utilize and extrapolate from available data including but not limited to data regarding its efforts to protect its employees.

Sincerely,



Rock Martin, P.G.
Chief, Technical Services Section
Bureau of District Mining Operations