



Sent via e-mail only

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February 21, 2022

Richard Tallman, P.E.
Pottsville District Mining Office
Pennsylvania Department of Environmental Protection
5 West Laurel Boulevard
Pottsville, PA 17901

**Re: Rock Hill Quarry – Erskine Environmental Consulting, Inc. Comments
Hanson Aggregates Pennsylvania LLC
SMP No. 7974SM1
East Rockhill Township, Bucks County, PA**

Dear Mr. Tallman:

Hanson Aggregates Pennsylvania LLC (“Hanson”) provides this response to the December 6, 2021 and December 27, 2021 comment letters submitted by the Rockhill Environmental Preservation Alliance, Inc. (“REPA”), which included technical memoranda prepared by Dr. Bradley Erskine of Erskine Environmental Consulting (“EEC”).

Hanson has expended significant resources to assess the presence of naturally occurring asbestos at the Rock Hill Quarry (“Quarry”) and to propose implementing an operating protocol to protect public health during future Quarry operations. Hanson has timely responded to each of the Pennsylvania Department of Environmental Protection’s (“PADEP”) information requests and technical deficiency letters since PADEP’s December 5, 2018 order to cease operations at the Quarry. Each of Hanson’s submissions is available for public review on PADEP’s webpage¹.

Despite this, REPA continues to claim that Hanson is evasive and that PADEP should permanently cease all operations at the Quarry. EEC continues to offer commentary that confuses analysis of Hanson’s responses. REPA continues to make clear that its sole interest is to close the Quarry no matter how Hanson responds to PADEP’s requests and no matter the data generated at the property.

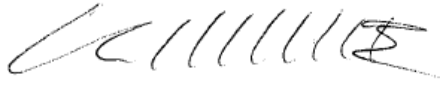
¹ <https://www.dep.pa.gov/About/Regional/SoutheastRegion/Community%20Information/Pages/Rock-Hill-Quarry-.aspx>

Hanson remains committed to working with PADEP to allow the removal of the Cessation Order so that quarrying activities can safely resume at the Rock Hill Quarry

Regards,



Andrew J. Gutshall, P.G.
Area Environmental Manager



Charles E. McChesney II
Senior Associate General Counsel

encl: as stated

cc: John Stefanko, PADEP (e-mail only)
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HANSON AGGREGATES PENNSYLVANIA LLC

RESPONSE TO ERSKINE ENVIRONMENTAL CONSULTING NOVEMBER 13 AND DECEMBER 27, 2021 TECHNICAL MEMORANDA

ISO 10312 Sampling Protocol

Hanson has affirmatively stated that it will count all fibers that exceed 0.5 µm in length at the Quarry perimeter and that it will provide this data to PADEP. Consistent with this statement, Hanson provided PADEP with the final laboratory results from recent background sampling events, included a map identifying the location of the single identified structure, electron micrograph imagery of the structure, an energy dispersive x-ray spectrum, and a selected area electron diffraction pattern, as well as an R.J. Lee Group (“RJLG”) memorandum reviewing the data.²

In their recent submissions, REPA and EEC spent a significant amount of time criticizing RJLG’s analysis and methodology. Hanson and RJLG have explained at length in previous submissions to PADEP the manner in which Hanson’s consultants performed sampling events and how RJLG analyzed the data collected, including a detailed RJLG memorandum responding to questions raised by EEC.³

Hanson and RJLG reiterate their previous invitation that PADEP should coordinate a visit to RJLG to review documents related to its methods and standard operating procedures if it has any remaining questions as to RJLG’s analysis of the data collected at the Quarry. As RJLG has previously stated, its laboratory standard operating procedures are controlled documents which may contain proprietary information, and as such are generally not made available for distribution outside of the organization. RJLG regularly makes operating procedures available to clients, assessors, and government organizations and would be happy to arrange time and space for PADEP personnel to review the relevant documents.

Please contact Bryan Bandli, Ph.D., Principal Investigator with RJLG (bbandli@rjleegroup.com, 724-387-1802) at your convenience to coordinate a date and time to review relevant procedural documents.

Definition of Asbestos

Much has been made of the term “asbestos” and the differences between types of asbestos minerals from a regulatory and public health perspective. Hanson has focused on the regulatory definitions of “asbestos” because Hanson is obligated to comply with applicable regulations in order to operate its facility and the definitions inform the scope of those obligations. In short, Hanson *must* focus on the “regulatory” terminology.

As a primary example, Hanson must adhere to the federal Mine Safety and Health Administration (“MSHA”) regulations. MSHA defines “asbestos” to specifically mean asbestiform fibers – i.e., “chrysotile, cummingtonite-grunerite asbestos (amosite), crocidolite, anthophyllite asbestos,

² Available at

https://files.dep.state.pa.us/RegionalResources/SERO/SEROPortalFiles/Community%20Info/RockHillQuarry/NaturalResources/Asbestos%20Information%20-%20Timeline/Attachment_A-RJLG_Memorandum-C-C.pdf

³ Available at

https://files.dep.state.pa.us/RegionalResources/SERO/SEROPortalFiles/Community%20Info/RockHillQuarry/NaturalResources/Asbestos%20Information%20-%20Timeline/Attachment_A-RJLG_Memorandum-C-C.pdf

tremolite asbestos, and actinolite asbestos.” 30 C.F.R. 57.5001. MSHA establishes a permissible exposure limit (“PEL”) for mine personnel to “asbestos” fibers during an 8-hour work-shift. 30 C.F.R. 57.5001(b)(2)(i). To meet these requirements, Hanson must be able to measure mine worker exposure to asbestiform fibers, and any laboratory assisting Hanson must be able to properly identify and distinguish them from non-asbestiform varieties.

The MSHA definition of “asbestos” is consistent with other regulatory definitions of the term. OSHA regulations define “asbestos” to mean asbestiform fibers: “chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.” 29 C.F.R. 1910.1001(b). EPA’s National Emissions Standards for Hazardous Air Pollutants (“NESHAP”) regulations require regulated emission sources to control “asbestos” emissions and define “asbestos” to mean “the asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite.” 40 C.F.R. 61.141.

PADEP incorporates EPA’s NESHAP definition into its own National Emission Standards for Hazardous Air Pollutants regulations at 25 Pa. Code § 124.3. Further, under PADEP’s Chapter 127 regulations, an owner or operator of an “asbestos abatement or regulated demolition or renovation project” subject to 40 C.F.R. Part 61, subpart M (i.e., section 61.141) and the Pennsylvania “Asbestos Occupations Accreditation and Certification Act” (AOACA) must submit a notification form and fee to the PADEP. 25 Pa. Code § 127.708. Notably, the AOACA defines “asbestos” to mean “[t]he asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite (amosite), anthophyllite, actinolite and tremolite.” 63 P.S. § 2102. As with federal regulations, the applicable definitions of “asbestos” identify the scope of a regulated entity’s obligations and, to comply, those entities must be able to identify asbestiform fibers.

EEC’s criticism that Hanson is only focused on “regulatory terminology” overlooks this legal reality. See EEC Technical Memorandum (Nov. 13, 2021), at 7. EEC would have the regulated community ignore the promulgated definitions of “asbestos” and instead, states that “the definition of asbestos is that which is reported by the individual test methods.” See EEC Response to RJLG Memorandum, EEC Response 2, at 5. EEC’s demand puts the cart before the horse: a laboratory method does not exist in a vacuum nor, importantly, establish a legal obligation to which a regulated entity must abide; instead, it is a tool that may be used to analyze data to determine an entity’s compliance with applicable regulations.

EEC’s criticism also mistakenly assumes “regulatory terminology” and public health are mutually exclusive focuses. The opposite is true: as has been discussed at length, the regulatory terms were defined to reflect the consensus that certain minerals clearly present a risk to public health. The OSHA and MSHA definitions of “asbestos” – i.e., the asbestiform varieties – reflect the scientific and public health consensus that those minerals present a clear risk to human health and that the same consensus does not exist for non-asbestiform particles.

Finally, EEC ignores that, per its Asbestos Monitoring and Mitigation Plan (“AMMP”), Hanson has proposed to count all fibers per the modified ISO 10312 method that exceed 0.5 µm in length at the Quarry perimeter and to provide that data to PADEP within 24 hours of Hanson’s receipt of the laboratory results. PADEP will be able to monitor the total amount of fibers counted (if any) and whether Hanson has taken any corrective action.

Proposed Reporting and Corrective Action Criteria

In its December 6, 2021 response to the PADEP, Hanson proposed two corrective action criteria – one that counts Phase Contrast Microscopy-equivalent (“PCMe”) fibers and one that counts elongated mineral particles (“EMP”) generated during Quarry activities.⁴ The former is a conservative measurement of risk to offsite receptors from PCMe fibers at the Quarry perimeter, while the latter is a measurement of the effectiveness of Hanson’s dust mitigation measures onsite. Either of these criteria can result in corrective action under Hanson’s AMMP if a respective threshold is exceeded.

In its memorandum, EEC confuses Hanson’s proposed PCMe and EMP thresholds. EEC states that Hanson proposes to only count asbestos fibers that exceed 5 µm in length and to decrease the proposed threshold by a factor of ten to 0.1 f/cc. EEC is incorrect. Hanson has proposed two separate, concurrent thresholds, either of which may trigger corrective action:

1. PCMe Asbestos Fiber threshold: Counts asbestiform fibers that exceed 5 µm in length against a 0.01 f/cc threshold; and
2. EMP threshold: Counts EMPs that exceed 0.5 µm in length against a 0.1 EMP/cc threshold.

Both can be measured against the same set of data collected at perimeter monitors. In fact, this proposal appears consistent with that recommended by EEC:

All particle sizes should be used to trigger response actions, and a subset should be used for risk analysis purposes, as appropriate.

EEC Technical Memorandum (Nov. 13, 2021), at 11. Hanson proposes to do just that.

Hanson reiterates that its proposal reflects its argument that EMPs should not be associated with a risk based standard. EPA’s Framework recommends a measurement to assess risk posed by PCMe fibers. See EPA Framework for Investigating Asbestos-Contaminated Superfund Sites, OSWER Directive #9200.0-68 (September 2008), Appendix C, at C-4. EPA defines PCMe structures as “asbestiform structures greater than 5 microns in length having at least a 3 to 1 length to width (aspect) ratio.” See id., Appendix A, at A-3. (emphasis added). It is important to maintain this distinction so that EMP data generated during Quarry operations is not unnecessarily associated with risk posed to offsite receptors.

Hanson Safety Data Sheet for Rock Hill Diabase

OSHA requires the dissemination of information related to the identity and hazards of certain chemicals in order to ensure safety in the workplace. As discussed above, OSHA regulations define “asbestos” to mean “chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.” 29 C.F.R. 1910.1001(b). Consistent with that definition, Hanson’s Safety Data Sheet

⁴ Available at https://files.dep.state.pa.us/RegionalResources/SERO/SEROPortalFiles/Community%20Info/RockHillQuarry/Naturally%20Occurring%20Asbestos%20Information%20-%20Timeline/2021-12-06_Hanson_Response_to_Dept._10-21-2021_Elevated_Review_ltr_SDSrev01.pdf

(“SDS”) for Rock Hill Diabase identifies the composition of its product and includes the descriptors “actinolite, asbestiform” and associated CAS number 1332-21-4.

EEC states that Hanson’s use of the term “actinolite, asbestiform” does not communicate to the recipient that the product contains asbestos, and that “actinolite, asbestiform” is not a synonym for asbestos. EEC Technical Memorandum (Dec. 27, 2021), at 3. EEC’s criticism is wrong and misleading: OSHA explicitly includes asbestiform actinolite as a synonym of the general term “asbestos.”⁵

Confusingly, EEC also states that Hanson must disclose that its product “contains asbestos as reported by ISO 10312, described under CAS 1332-21-4, and regulated under the OSHA standard.” Id. As discussed above, EEC’s demand that Hanson define “asbestos” per a test method rather than the promulgated regulatory definitions is not practical. Further, EEC’s demand that Hanson identify asbestos as defined under ISO 10312 is at odds with both CAS Number 1332-21-4 and the OSHA regulation, which are both limited to asbestiform varieties of chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, and actinolite asbestos.

⁵ Available at <https://www.osha.gov/chemicaldata/231>