



August 29, 2022

The Honorable Steven J. Santarsiero
Senate of Pennsylvania
Senate Post Office Box 203010
Harrisburg, PA 17120-3010

Dear Senator Santarsiero:

Thank you for your letter regarding the Pennsylvania Department of Environmental Protection's (Department) Activity-Based Sampling Plan at the Rock Hill Quarry in East Rock Hill Township, Bucks County and the testing procedures used during each step in the plan.

In your letter, you cited concerns regarding the sampling time frame, asbestos vs. amphibole fiber nomenclature, and having an Air Quality inspector in attendance during the activity-based test and sampling.

Sampling time frame

As noted in your letter, Hanson's first round of activity-based sampling was drawn over a 9-hour period. In accordance with DEP direction, Hanson's sampling was performed after at least three days of dry weather with no precipitation to allow for a worst-case scenario/possible dusty conditions.

Normal activities during quarry operations involve dust suppression which would include watering the roads. Dust suppression was not conducted during sampling before the vehicles were driven over the road to allow for a worst-case scenario/possible dusty conditions. DEP assumes that if any asbestos fibers were present, the amount of fibers being released into the air from the vehicles being driven over dry roads would be higher than during normal activities.

However, considering your concerns and the concerns of other Pennsylvanians, DEP will require Hanson to perform sampling both in accordance with the approved sampling plan and also at a higher flow rate at selected downwind points during the time frame when activity is occurring onsite.

Asbestos vs. amphibole fiber nomenclature

It is the Department's position that using the term asbestos to describe elongate mineral particles term is potentially restrictive and may be less transparent than using the term amphibole fiber. The term amphibole fiber is more inclusive and more accurately identifies the mineral fibers found at the Rock Hill Quarry without excluding fibers that do not meet the commercial asbestos definition.

The United States Geologic Survey states (emphasis added), "The term asbestos is a generic designation referring usually to six types of naturally occurring mineral fibers that are or have been commercially exploited. These fibers belong to two mineral groups: serpentines and amphiboles.

Secretary

The serpentine group is represented by a single asbestiform variety-chrysotile. There also are five commercial asbestiform varieties of amphiboles-anthophyllite asbestos, cummingtonite-grunerite asbestos (amosite), riebeckite asbestos (crocidolite), tremolite asbestos, and actinolite asbestos.”¹

In Dr. Bradley Erskine’s June 6, 2019 *Review of Qualitative Geologic Survey Sampling Plan, Rockhill Quarry*,² Dr. Erskine stated: “Some consultants and many laboratories rely on the commercial definition of asbestos and report asbestos only when the composition of an amphibole fiber is equivalent to the very narrow compositions that were mined and applied to building materials. This practice eliminates many amphibole compositions and morphologies that are present in rock and soil, and can produce a deceptive result (in rock, water, and air samples). There is consensus among many researchers, particularly mineralogists, that this definition and practice is not appropriate for NOA (Naturally Occurring Asbestos, definition added). It is recommended that a mineralogical definition of asbestos be employed, and all amphibole compositions be determined and reported. ... Using a mineralogical definition of minerals will prevent eliminating amphiboles from lab reports that are not precisely the same compositions as those applied in building materials.”

It is the Department’s position that using the term amphibole fiber properly identifies the mineral fibers found at the Rock Hill Quarry.

Air quality inspector on site during testing

Air quality personnel were present during the first round of activity-based sampling and will continue to observe sampling activities on the site when scheduled; you may find their June 1, 2022 report in the Air Quality section at the very bottom of the Department’s Rock Hill Quarry webpage.³

The Department will continue to transparently and diligently consider the concerns of neighboring residents and health experts before making any determination regarding the future of quarry operations at the Rock Hill Quarry.

Should you have any additional questions, please contact Taylor Nezat, Acting Director of Legislative Affairs, by email at tnezat@pa.gov or by telephone at 717.783.8303.

Sincerely,



Ramez Ziadeh, P.E.
Acting Secretary

¹ From <https://www.usgs.gov/publications/asbestos>.

² Available at <https://files.dep.state.pa.us/RegionalResources/SERO/SEROPortalFiles/Community%20Info/RockHillQuarry/Naturally%20Occurring%20Asbestos%20Information%20-%20Timeline/June%206%2c%202019%20-%20Timeline.pdf>.

³ <https://www.dep.pa.gov/About/Regional/SoutheastRegion/Community%20Information/Pages/Rock-Hill-Quarry-.aspx>