

Rock Hill Quarry
(“RE Pierson”, “Hanson”, “East Rockhill”)

DEP PROGRAMS:

Office of Active and Abandoned Mining Operations (AAMO)
Pottsville District Mining Office (PDMO)
Southeast Regional Office – Air Quality (SERO AQ)
Office of Communications (Comms)
Legislative Affairs (Leg)
Office of Chief Counsel (OCC)

NON-DEP QUARRY PARTIES

Hanson Aggregates – Quarry owner and permittee
RE Pierson – Contract operator
EarthRes – Environmental consultant on mining
Compliance Plus – Environmental consultant on air quality

CURRENT STATUS OF REGULATED OPERATION: Mining and related activities are under a cessation order until lifted, in writing, by DEP. Certain activities at the site are still permissible, most notably, the construction of the rock crusher. However, activities at the site have ceased at this time.

BACKGROUND:

- The Rock Hill Quarry, located in East Rockhill Township, Bucks County, has been active since it was first permitted in 1976.
- In 2017, RE Pierson (the operator) was awarded a contract from the Pennsylvania Turnpike Commission.
- December 4, 2017: Pierson applied to the Southeast Regional Air Quality program (SERO AQ) for general permit applications for a portable crushing plant and associated engines to crush the stone onsite.
- December 27, 2017: SERO AQ issued general permits (GP3-03-0153 and GP9-09-0080) for the portable crushing plant and associated engines to Pierson.
- In late 2017, DEP became aware of the potential presence of asbestos.
- On January 4, 2018, DEP’s Pottsville District Mining Office (PDMO) ordered all production drilling, blasting, and crushing activities to cease at the quarry until a comprehensive investigation plan is submitted and approved.
- January 18, 2018: Hanson Aggregates submitted a ‘Naturally Occurring Asbestos Monitoring Plan’ to DEP for review, which included results from 9 aggregate samples that showed no positive asbestos results. As part of this plan, the company committed to sampling new areas before quarrying.
- January 25, 2018: PDMO lifted cessation order and accepted 1/18/18 plan, which requires additional field review and aggregate sampling for asbestos sampling whenever new mining areas are prepared to be quarried.
- February 20, 2018: SERO AQ received general permit applications from Pierson for a replacement portable crushing plant and associated engines.
- March 4, 2018: SERO AQ issued General Permits (GP3-09-0157 and GP9-09-0083), to Pierson which replaced the previously issued GPs.

- May 23, 2018: RE Pierson submitted an application to SERO AQ for a 1000 ton/hr rock crusher.
- May 24, 2018: SERO AQ issued a Notice of Violation (NOV) to Pierson for beginning installation of the primary crusher without first obtaining plan approval. The pouring of the concrete pad where the unit would be placed is considered the commencement of construction and required the plan approval. RE Pierson immediately ceased any further work on the crushing plant.
- August 9, 2018: DEP received administratively complete application from Pierson for a General Permit for an asphalt plant at the site
- September 7, 2018: SERO AQ issued General Permits (GP13 and GP9) to RE Pierson for the asphalt plant and associated engines.
- September 20, 2018: SERO AQ hosted public hearing to receive comments on the Plan Approval for the rock crusher
 - Comments referenced concern about the presence of asbestos at the site, fugitive dust and the proximity of the quarry to schools and residential areas
- November 28, 2018: PDMO renewed the National Pollutant Discharge Elimination System (NPDES) permit, which was modified to include a requirement that oil and grease be monitored and reported..
- December 5, 2018: SERO AQ issued Air Quality Plan Approval #09-0241 for 1000 ton/hr rock crusher to RE Pierson
 - The plan approval contains conditions that require asbestos air monitoring and enhanced dust mitigation.
- December 5, 2018: Hanson/RE Pierson notified DEP of a positive asbestos result from a November 2018 hand sample taken at the quarry. PDMO issued a cessation order the same day.
 - A total of 14 investigations throughout 2018 until November did not indicate the presence of asbestiform minerals. As part of those investigations 21 composite drill cutting samples and 5 hand samples were collected and analyzed, with only the one positive asbestos analysis.
- December 14, 2018: DEP met with Hanson, Pierson, Compliance Plus and EarthRes to discuss 12/5/18 finding of asbestos and next steps moving forward.
 - At the meeting, the following items were discussed and agreed to:
 - The December 5, 2018 cessation order will remain in place until all of the following items are submitted, reviewed and deemed satisfactory by DEP (any approval would be in writing):
 - **Enhanced Asbestos Assessment Plan – Not yet submitted as of 1/4/19**
 - Hanson and its consultant will conduct a physical assessment of the quarry, in coordination with staff from PDMO. This assessment is being done to determine what additional investigation and sampling can be undertaken to enhance the existing plan. It will also supply the Department with additional site information on the possible extent of asbestiform minerals within the mining area.
 - Hanson will submit a plan to characterize asbestos in the quarry. At a minimum, the plan will require:
 - additional physical mapping of possible asbestos containing geologic features;
 - additional drilling to assess the possible extent and/or location of asbestos containing geologic features;

- and sampling of additional areas and geologic features for the presence of asbestos.
 - The plan will be submitted to and reviewed by PDMO.
- **Background or Asbestos Characterization Sampling Plan for recently processed aggregate stockpiles and existing water bodies on site– Submitted and approved, 12/19/18**
 - Hanson identified several areas for additional asbestos sampling, including but not limited to:
 - 2 on-site ponds, pits, tailings from crusher, and NPDES outfall. This will be sampled for asbestos ASAP.
- ⊖ **DRAFT Air Monitoring Plan/Dust Mitigation Plan – Submitted 12/20/18, it was reviewed and comments sent back to RE Pierson and their consultant, Compliance Plus, for consideration prior to the submittal of the final plan.**
 - The plan is to include locations of sampling
 - On site locations, perimeter sampling, personnel monitoring and off-site locations.
 - Sampling methods to be used
 - The plan also includes other mitigation methods to be used during blasting, mining, crushing or other activities; use of water or other surfactant suppressants.
 - Outer perimeter of the quarry and any areas intended to be mined will be reviewed and added to the proposed air sampling plan.
 - Areas surrounding the portable crusher will be reviewed and added to the proposed air sampling plan
 - Any areas with earth moving activity, such as truck traffic will be reviewed and added to the proposed air sampling plan.
 - This plan is required by Plan Approval #09-0241 and will be submitted for review and approval by mining and air quality programs.
 - In addition, Hanson must also submit revised Module 16 (Blasting Plan) and Module 17 (Air Pollution and Noise Control Plan) information to the mining office to address the potential to encounter asbestiform minerals during mining operations at the site.
- **Immediate Implementation – Ongoing**
 - Increased dust suppression, actively enforce low speed limits, require respirable dust personal monitors for workers (after determination of type, etc.), and other background sampling.
 - After the meeting, Hanson and Pierson agreed to voluntarily cease removal of any material off site until further notice.
- December 19, 2018: Hanson and its consultant submitted the **Background or Asbestos Characterization Sampling Plan for recently processed aggregate stockpiles and existing water bodies on site**; mining approved the plan on 12/19/2018.
- December 20, 2018: DEP sent Rock Hill Quarry Update to stakeholders with FAQs and informing recipients they will be receiving additional updates in the future.
- December 20, 2018: DEP Air Quality inspector on site to observe aggregate and water sampling conducted by EarthRes.

- December 20, 2018: Compliance Plus submitted a Draft Air Monitoring Plan/Dust Mitigation Plan; this plan was reviewed and comments sent back to RE Pierson and Compliance Plus for consideration prior to the submittal of the final plan.
- December 21, 2018: DEP received aggregate/material sample results from EarthRes; no samples tested positive for asbestos. On January 10, 2019: DEP received water sample results from EarthRes; all samples were below the allowable drinking water standard for asbestos, but asbestos fibers were detected in some samples. This sampling was done in accordance with the **Background or Asbestos Characterization Sampling Plan for recently processed aggregate stockpiles and existing water bodies on site** approved on 12/19/2018.
- Additional sampling of the aggregate stockpiles is still required to meet the one sample per 1,000 ton sample requirement and will be undertaken once a sampling plan for that criteria is submitted and approved by the PDMO. In the interim no aggregate material is allowed to leave the site.
- January 9, 2018: DEP met with legislators and staff from the offices of Congressman Fitzpatrick, Senator Santasiero, Representative Craig Staats, and East Rockhill Township.

NEXT STEPS:

- DEP AQ will review and evaluate the Air Monitoring Plan/Dust Mitigation Plan once submitted to determine whether plans are adequate to ensure the safe operation of the site
- In addition to sampling conducted by the company, DEP PDMO will also be conducting its own sampling at the quarry.
- In addition to the ongoing asbestos sampling and monitoring, the following next steps are also required of the quarry:
 - Revisions to the Surface Mining Permit are required before the rock crusher could be operational.
 - Revisions to the Surface Mining Permit are required before the asphalt plant could be operational.
 - Construction of the asphalt plant has not begun. Local zoning currently does not allow asphalt plants in the zone where the quarry is located. This is the subject of litigation between the quarry and East Rockhill Township.
 - Revisions to the Module 16 (Blasting Plan) and Module 17 (Air Pollution and Noise Control Plan) information contained in the Surface Mining Permit to address the potential to encounter asbestiform minerals during mining operations at the site.
 - Hanson has proposed revisions to the NPDES which would be subject to public notice and public participation.