

June 21, 2023

Heidelberg Materials Northeast, LLC Attn: Andrew Gutshall P.G. Environmental Manager 7660 Imperial Way Allentown, PA 18195-1040

Re: Approval of Activity Based Sampling Event 4: 500-ton Removal Event Surface Mining Permit No. 7974SM1
Rock Hill Quarry Operation
East Rock Hill Township, Bucks County

## Dear Operator:

The Department of Environmental Protection (DEP) is in receipt of the test results of the April 12, 2023 Sampling Event 3: Stockpile Movement. Please proceed with the Activity-Based Sampling Event 4: 500-ton Removal Event and apply the following conditions:

1. Include two air sampling monitors at each of the eight sampling points: M-1 to M-8. Please set one sampling monitor to run during the time the activity is occurring and set the sampling rate to match the duration of the activity. For example: if the activity is to be projected to last 4 hours and your sample volume target is 1200 L, set the rate at 5 L/Minute or if the activity is to be projected to last 5 hours with a 1200 L volume target, set the sampling rate to 4/L/Minute.

Please set a second sampling monitor at each monitoring point to run at a lower rate during the entire workday that the activity-based sampling is occurring.

The quantity of air collected in each sample and the grid openings counted in sample analysis must achieve an analytical sensitivity of 0.001 structures/cc.

- 2. Report the number and dimensions of the grid openings on the sample filter examined and used to calculate the area analyzed in the Laboratory analysis.
- 3. Include Chain of Custody documents with the sample results along with the analyst bench sheets.
- 4. Provide the list of the equipment that will be delivered and operated on the Rock Hill Quarry Site.
- 5. Provide a description of the 500-ton removal activities and an estimate of the number of hours the 500-ton removal activities will take prior to the activity taking place.
- 6. Maintain continuous operation of the autonomous weather station at the Rock Hill site to monitor and record wind speed, wind direction, relative humidity, temperature, and precipitation

data prior, during and after the activity-based sampling and provide this information on the weather data sheets.

- 7. Conduct activity-based sampling only after three days of dry weather with no precipitation and do not conduct the sampling if these conditions are not met.
- 8. Provide GPS vehicle tracking data logs for each vehicle or construction machine used in the 500 Ton Removal event. Include tracking data for the water truck and front-end loader during this event.
- 9. Schedule the "activity" portion of the activity-based sampling during the middle portion of the sampling period timeframe. Make every effort to balance pre-activity air sampling with post-activity air sampling.
- 10. Conduct sampling with all eight air sampling monitor stations operating. Incomplete sampling results will nullify the activity-based sampling event.
- 11. DEP directs that the method of counting fibers is expressed below with the intent that this is the standard that shall be used when determining if corrective actions are needed to improve dust controlling Best Management Practices.

The analytical methods and laboratory analysis for asbestos in air analysis to be utilized as part of this plan shall be those described in ISO 10312-2019-10 "Ambient Air – Determination of Asbestos Fibers – Direct Transfer Transmission Electron Microscopy Method", as modified by Page C-3 of EPA's "OSWER Directive #9200.0-68, September 2008, Framework For Investigating Asbestos-Contaminated Superfund Sites", which states that "Under the ISO method, two specific counting schemes are detailed. The first scheme is more general and allows for the counting of fibers that are 0.5  $\mu$ m in length or greater and have aspect ratios of 5:1 or greater. In routine practice, TEM is able to resolve fibers down to approximately 0.1  $\mu$ m in width, as compared to the resolution for routine PCM (0.25  $\mu$ m). Therefore, short thin fibers that would not be detected using PCM will be detected using TEM under the general counting scheme. EPA recommends modification of the aspect ratio to 3:1 for this counting scheme".

If the above analysis confirms asbestos fiber concentrations is in excess of 0.01 fiber/cc in any sample, then corrective action requirements are triggered.

Heidelberg may choose to do comparative analyses and report the concentrations of Elongate Mineral Particles (EMP/cc) in the samples as described and proposed in the December 6, 2021 response to Item 4. Technical Deficiency 6 of the DEP October 21, 2021 comment letter. If Heidelberg chooses to do so, Heidelberg must provide the specific Standard Operating Procedure used to define an EMP in this analysis.

12. Obtain the results from this activity-based sampling event and provide those results to the DEP before initiating any additional activity.

- 13. In addition, adhere to all conditions stated in the Hanson (now Heidelberg) February 1, 2022 Revised Limited Activity Sampling Plan and stated in the Hanson (now Heidelberg) Asbestos Monitoring and Mitigation Plan dated July 6, 2021.
  - a. Heidelberg will use a state-of-the-art street sweeper to clean paved roads before other equipment arrives at the quarry during and after each limited activity, if deemed necessary.
  - b. All internal site roadways to be used during the limited activity will be adequately wetted using a water truck before any vehicle traffic, including tri-axle trucks and delivery of the equipment (i.e., rubber-tire loader).
  - c. The storage pile(s) will be adequately wetted in the area where the material will be removed during the loading activity.
  - d. The material will be loaded into the truck from the minimum drop height possible.
  - e. Via the water truck or equivalent methods, additional water application will be completed as necessary if the newly exposed aggregate shows signs of dryness.
  - f. Tri-axle truck wheels will be washed off using the water truck spray or other equivalent method before exiting the site.
  - g. Tri-axle truck loads will be properly tarped before exiting the site.
  - h. Water will be applied to control dust by increasing the moisture content of the material. Increasing the moisture content involves dust prevention, by preventing dust from becoming airborne, as opposed to dust suppression, which involves knocking down dust after it has already become airborne.
- 14. Lastly, store the material removed from the Rock Hill Quarry site at a safe secure location until all air sampling results have been analyzed and reviewed. Please identify and communicate to the Department the storage location prior to commencing the 500-Ton removal event.

Please proceed with Activity Based Sampling Event 4: 500-ton Removal at the earliest opportunity.

Should you have any questions, please contact the office.

Sincerely,

Richard E. Tallman, P.E. Environmental Engineer

Bureau of District Mining Operations