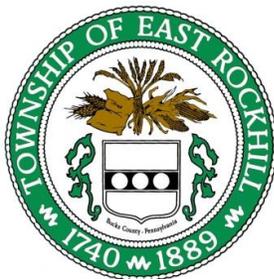


EAST ROCKHILL TOWNSHIP



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May 5, 2023

Via Electronic Mail

Michael Kutney, P.G.

Permits Chief

Department of Environmental Protection

Pottsville District Mining Office

5 West Laurel Boulevard

Pottsville, PA 17901

Re: NPDES Permit Renewal/Modification Application; Rock Hill Quarry

Dear Mr. Kutney:

On behalf of East Rockhill Township ("Township"), this office and other Township consultants have reviewed an application dated January 23, 2023 (the "Application"), submitted by Heidelberg Materials Northeast LLC ("Heidelberg"), formerly named Hanson Aggregates Pennsylvania LLC, requesting to renew and modify National Pollutant Discharge Elimination System Permit No. PA0594121 (the "NPDES Permit") for the Rock Hill Quarry in East Rockhill Township, PA (the "Site"). Please accept the following comments on the Application. These do not necessarily reflect all of the Township's comments on the Application, and the Township may submit additional comments in the future.

1. The Application Was Untimely

The NPDES Permit has an expiration date of July 19, 2023. Condition 3 of the NPDES Permit states, consistent with 25 Pa. Code § 92a.75, that a "complete application for renewal or reissuance of this permit . . . must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date)." The Application was therefore due on January 20, 2023.

On January 19, 2023, Heidelberg submitted an incomplete application that did not include an Anti-Degradation Application Supplement, which is required because the receiving water is classified as Exceptional Value ("EV"). The Anti-Degradation Application Supplement states: "Section 1 must be completed prior to a formal submission of the mining permit application. . . . Pre-application discussions are required. Submission of a mining permit without adequate pre-application information will result in the permit application being returned to you as incomplete."

On January 23, 2023, Heidelberg submitted the Application, which included the Anti-Degradation Application Supplement. Section 1 was completed, and Section 2 was left blank. The Application was untimely submitted, and it continues to be incomplete at least until Heidelberg completes Section 2 of the Anti-Degradation Application Supplement. If the renewal of the NPDES Permit is not issued by July 19, 2023, the terms and conditions of the NPDES Permit would expire and would not automatically continue under 25 Pa. Code § 92a.7.

2. Anti-Degradation Application Supplement

Section A.16 of the Application and Section 1.B of the Anti-Degradation Application Supplement state that the receiving water, an unnamed tributary to Tohickon Creek, referred to as Bog Run, has been "petitioned" for reclassification, which is not accurate. After the Department issued the renewal of the NPDES Permit in 2018, the Township appealed the NPDES Permit to the Environmental Hearing Board in January 2019 (the "NPDES Permit Appeal") and raised as an objection that the Department did not evaluate the existing use of Bog Run (and its associated Quakertown Swamp) in the issuance of the NPDES Permit. Four months later, in May 2019, the Department initiated an evaluation of the reclassification of Bog Run, according to the Department's Ongoing Stream Redesignation Evaluations list (last updated 2/3/2023). The Department initiated that evaluation in the context of the renewal of the NPDES Permit, after the NPDES Permit was issued. The Department's draft Water Quality Standards Review Stream Evaluation Report for Bog Run, dated 2021, states that the Department conducted an evaluation of Bog Run "in response to a National Pollutant Discharge Elimination System (NPDES) permit (PA0594121) renewal for the Rockhill Quarry (aka Hanson Quarry) located within the UNT to Tohickon Creek basin."

Given that the existing use of Bog Run is EV, the Department's regulations require Heidelberg to evaluate non-discharge alternatives. 25 Pa. Code § 93.4c(b)(1)(i)(A). The Department's Anti-Degradation Application Supplement states: "Every effort must be made to achieve total non-discharge or partial non-discharge." In Section 1.C of the Anti-Degradation Application Supplement (the "Non-Discharge Alternatives Evaluation"), Heidelberg identified two of the ten listed non-discharge alternatives as alternatives "to be used" and proceeded to evaluate only those two alternatives in a narrative attached to the Anti-Degradation Application Supplement. Those two alternatives are: (1) limiting disturbed area (vertically or horizontally), extent and/or duration of mining; and (2) recycling/reuse of water onsite. Chapter 7 of the Department's Water Quality Antidegradation Implementation Guidance (the "Antidegradation Guidance") provides detailed instructions on how to evaluate non-discharge alternatives. Heidelberg should be required to follow that process, analyze all possible non-discharge alternatives, and provide its evaluation to the Department.

For the alternative of limiting disturbed area (vertically or horizontally), extent and/or duration of mining, Heidelberg explained that it actually does not intend to limit any disturbed areas because the areas have already been disturbed. Heidelberg also explained that it does not intend to limit the duration of mining and in fact indicate that they intend for mining to "last for decades," long after the next five-year NPDES permit renewal cycle that is the subject of the Application. Heidelberg states that it might reclaim highwalls after mining is completed but does not explain how that would have any impact on the quantity of Heidelberg's discharge, particularly over the next five years. Notably absent from the analysis is any discussion about limiting the extent of mining. Heidelberg could eliminate its proposed discharge by limiting the extent of mining and not mining within the mine pit (and thus not dewatering the mine pit).

For the alternative of recycling/reuse of water onsite, Heidelberg states that it will use a "portion of water collected in the Quarry sump" to supply a water truck for dust suppression and "to water down stockpiles and in the future may be used the processing plant." Heidelberg's reference to a future "processing plant" is the only reference to a processing plant in the Application and is not otherwise accounted for in the Application. The Township requests additional information on the nature of the processing plant referred to in the Application.

As mentioned above, Section 2 of the Anti-Degradation Application Supplement is incomplete, and the Township is reserving additional comments on the Anti-Degradation Application Supplement until Heidelberg submits a complete Section 2 to the Department.

3. NPDES Discharge Point Modification Report

In Heidelberg's NPDES Discharge Point Modification Report attached to the Application as Attachment C-21, Heidelberg identified the partially filled culvert under Rich Hill Road as a limiting factor for flow. Heidelberg's calculations indicate that the Rich Hill Road culvert can only pass 4.89 cubic feet per second (cfs) and has an annual flow of 0.2773 cfs. Heidelberg proposes a pumping rate of 4.61 cfs, which will max out the capacity of the Rich Hill Road culvert on an annual basis, meaning that the Rich Hill Road culvert would be overloaded during every rain event. However, Heidelberg proposes stopping pumping only when rainfall exceeds the two-year rainfall event, which they calculated to be 94 cfs. Based on Heidelberg's calculations, no pumping should be permitted during rain events.

4. The Application is Inconsistent with Heidelberg's Erosion and Sedimentation Plan and Fails to Account for Discharges to Three Mile Run.

In the Section B.18 of the Application, Hanson indicated that rather than include a separate erosion and sedimentation ("E&S") plan in the Application, Heidelberg was incorporating by reference the E&S plan that is included in Module 12 of Heidelberg's mining permit. The Application proposes three outfalls that would ultimately drain to a single location near the northern property boundary of the Site and discharge to Bog Run. The E&S plan that is incorporated into the Application, however, shows that sediment traps have been installed to the south of the main entrance to the Site for discharges of water which follow a drainage ditch and drain to the south to Three Mile Run. Such discharges are neither covered by nor authorized by the NPDES Permit and are not accounted for in the Application. Notwithstanding that the Township raised this concern in 2019 in the NPDES Permit Appeal, Heidelberg still did not address discharges to the south to Three Mile Run in the Application.

In addition, there are a number of differences between Figure 1 in the Application and the E&S Site Plan that is included in Module 12 of Heidelberg's mining permit. The Application proposes three monitored outfalls that ultimately drain to Bog Run, whereas the E&S Site Plan only identifies one monitored outfall at the north property boundary. Sediment

Basin No. 2 also appears to be designed differently in the Application and in the E&S Site Plan. The Application also proposes a clarifying pond for water withdraws from the mine pit in place of what is identified in the E&S Site Plan as a processing plant treatment pond. Also, the channel identified near the western property boundary appears to follow a different path in Figure 1 of the Application and in the E&S Site Plan, and the culverts are designed and named differently.

The Application should account for discharges to the south to Three Mile Run, and Heidelberg should be required to align its E&S Site Plan with its proposed modifications in the Application.

5. Effluent Characterization Study

In the Application, Heidelberg is seeking a waiver from sampling requirements for organic toxic pollutants based on the assertion in Section D.26 that operations of the Rockhill Quarry represent gross sales of less than \$100,000 per year (1980 dollars). However, this information is contradicted elsewhere in the Application (Section A.9) where Heidelberg indicated that production will be at least \$100,000 (1980 dollars) per year. This same discrepancy appeared in Heidelberg's prior application for a renewal of the NPDES Permit in 2018. In the NPDES Permit Appeal, the Township objected and stated that the Department should either limit production to less than \$100,000 (1980 dollars) per year as a condition to the NPDES Permit or else require monitoring for organic toxic pollutants.

The Township has the following comments on the waiver requests included in Heidelberg's Effluent Characterization Summary (Attachment D-1 of the Application):

- **Asbestos:** Sampling conducted by Heidelberg shows that asbestos is present in surface water discharged to Bog Run. Heidelberg states in the Application, however, that, while asbestos is expected to be present in discharges, the levels of asbestos are "not anticipated . . . to present any risk." Notwithstanding that the sampling referred to by Heidelberg was conducted while mining activities were dormant and is not representative of levels of asbestos if full-scale mining activities (including drilling and blasting) were to occur as contemplated in the Application, whether Heidelberg believes that the levels of asbestos in discharges will or will not present a risk is irrelevant for effluent characterization. Asbestos is expected to be present in the discharge, and therefore a waiver should not be granted. The Township raised this concern in the NPDES Permit Appeal and requested that asbestos-related conditions be included in the NPDES Permit.
- **Common Parameters/Pollutants:** The Application states that organic compounds are not expected in the discharge, but there is a reasonable basis to expect them based on the anticipated use of fuels, oils, lubricants, solvents, and other materials associated with the equipment storage and maintenance areas, potential use of explosives, and other activities at the Site. Heidelberg should therefore not be granted a waiver for chemical oxygen demand, biochemical oxygen demand, ammonia, total organic carbon, and conductivity.
- **Organic Toxic Pollutants:** The Application states that organic toxic pollutants are not expected in the discharge, but there is a reasonable basis to expect them based on the anticipated use of fuels, oils, lubricants, solvents, and other materials associated with the equipment storage and maintenance areas, potential use of explosives, and other activities at the Site. Heidelberg should therefore not be granted a waiver for organic toxic pollutants.
- **Other Toxic Pollutants:** Antimony, Beryllium, Thallium, Cobalt, and Magnesium are present in the geology at the Site and would be expected to be present in the discharges at the Site, and therefore Heidelberg should not be granted a waiver for these parameters.
- **Conventional and Nonconventional Pollutants:** Total organic nitrogen and nitrate/nitrite would reasonably be expected in Heidelberg's discharge based on the use of explosives at the Site during blasting, which is contemplated in the Application. In addition, fuels and solvents used (or to be used) at the Site have the potential to be carried off-site in discharges to Bog Run. The Township raised this concern in the NPDES Permit Appeal and requested that the Department establish effluent limitations for oil and grease and acidity in the NPDES Permit. Furthermore, the PPC plan included in the Application appears to incorrectly state that no chemicals will be stored at the Site. Also, surfactants might be used in maintenance areas. The Application states that bromide is expected to be present in discharges but

attempts to avoid conditions relating to be bromide, claiming that bromide is not used at the Site, which is not relevant. Heidelberg should therefore not be granted a waiver of these parameters.

- **PFAS:** Surface water and groundwater sample results indicate that PFAS will be present in discharges at the Site, and therefore Heidelberg should be required to monitor for per- and polyfluoroalkyl substances (“PFAS”) in its discharges.

6. PFAS

Based on sample results reported in 2018 and 2022, concentrations of PFAS are present in groundwater at the Site and in the mine pit and the clarifying pit. In 2018, PFOA was detected in groundwater at a concentration of 4 ppt. In 2022, PFOA was detected at higher concentrations of 6.18 ppt and 5.58 ppt in the mine pit and clarifying pond, respectively. There were also detections of PFOS (1.57 ppt and 3.01 ppt) and PFBS (0.54 ppt and 0.51 ppt) in the mine pit and clarifying pond, respectively. To put these concentrations in context, the U.S. Environmental Protection Agency (“EPA”) recently proposed a maximum contaminant level (“MCL”) of 4 ppt for PFOA and PFOS.

In the NPDES Permit Appeal, the Township objected that the NPDES Permit does not contain any specific conditions to address the impact that pumping groundwater from the mine pit will have on water supply wells in proximity to the Site and on a PFAS plume in proximity to the Site. The Township also objected that the NPDES Permit does not address how groundwater from the mine pit is to be treated if the PFAS plume is drawn into the mine pit. Heidelberg’s Application includes a Groundwater Pumping Evaluation Addendum (Attachment G). The Township continues to review this document and will likely submit comments on this document in the future. The Township, however, initially notes that there is no discussion of the time period used for particle tracking or how that time period is related to the duration of dewatering or hydraulic conductivity. Also, there is no explanation for the selection of the location within the Diabase Ridge as the particle source and why the PFAS source area was not selected.

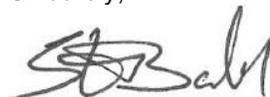
7. Additional Comments

- In Section C.21 of the Application, Heidelberg did not include an average flow rate or a design flow rate for discharges from the sediment basins, which should be included.
- In Section C.21 of the application submitted in 2018, Heidelberg stated that the flow would be continuous, but now Heidelberg is stating in Section C.21 of the Application that flow will only be intermittent and/or precipitation based. Heidelberg should explain this discrepancy.
- Section C.22 requires Heidelberg to describe how thermal impacts were evaluated and, if necessary, how they will be mitigated. Without describing how thermal impacts were evaluated, Heidelberg simply states that thermal impacts “are not anticipated.” Then, in Section D.24, Heidelberg states that the temperature of the discharge water will vary with the season. Heidelberg should be required to evaluate thermal impacts and describe that evaluation, as required by the Department’s application.
- In Section F.3 of the Application, Heidelberg did not list any of the chemicals that would be used and stored on the Site. Heidelberg’s failure to list any chemicals in Section F.3 is at odds with its statement in Section F.8 that chemicals will be removed or secured in locked structures during any shutdowns. Heidelberg should be required to provide the list of chemicals that it anticipates using and storing at the Site based on the mining activities that are contemplated in the Application.

* * *

Thank you for your consideration of these comments.

Sincerely,



Steven Baluh P.E.
Township Engineer

Michael Kutney, P.G. (via electronic mail)
Subject: NPDES Permit Renewal/Modification Application; Rock Hill Quarry
May 5, 2023
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cc: Marianne Morano, Township Manager (via email)
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