Written Findings for Special Protection Waters (HQ or EV watershed)

Specialty Granules, LLC (SGI), SMP No. 01180301

The applicant submitted a complete anti-degradation supplement for mining permits with appropriate information regarding the receiving stream Unnamed Tributary to/and Toms Creek which is designed as High Quality (HQ). The permit application was for a new discharge.

Details: The Northern Tract Quarry permit area is located immediately north of the existing Charmian Plant facility SMP No. 6477SM5, east of the existing Pitts Quarry SMP No. 01930302 and is bounded by T-382 (Lower Gum Springs Road) along the northern perimeter and SR-3014 (Iron Springs Road) along the eastern perimeter. The receiving streams are Unnamed Tributary to/and Toms Creek, classified for the following uses(s): High Quality (HQ)-Cold Water Fishes (CWF) and Migratory Fishes (MF). The NPDES permit facilitates two NPDES outfalls identified as outfall 001 and 002. Outfall 001 is located at 39° 46’ 9.23” N, 77° 26’ 37.99” W on the right-hand side when looking downstream of Toms Creek along Gum Springs Road. Outfall 002 is located at 39° 46’ 04.80” N, 77°26’ 09.11” on the left-hand side when looking downstream of Unnamed Tributary to Toms Creek along Iron Springs Road. The operator proposes to affect 85.0 acres within the 112.3 acre permit area for mining and erosion and sedimentation controls. All discharges from the proposed quarry will be pumped to the Charmian Plant Facility which discharges to Miney Branch (CWF) under NPDES Permit No. PA0009059. The estimated life of the operation is approximately 55 years.

The SEJ was received on August 30, 2017. The Cambria District Mining Office reviewed the SEJ and requested review assistance with SEJ on September 6, 2017. The SEJ was sent to California District Mining Office and Bureau of Mining Programs for review assistance on September 21, 2017. A conference call was held with the California District Mining Office and Bureau of Mining Programs on September 21, 2017 to discuss the SEJ.

A public hearing was held on Wednesday, January 30, 2019 at the Fairfield Fire and EMS Building, located at 106 Steelman Street, Fairfield, PA 17320. The purpose of the public hearing was to discuss the mining permit application and associated NPDES permit including the Social or Economic Justification (SEJ) submitted by the applicant to justify lower water quality discharges. During the hearing the Department received oral comments from the public and written comments during the two-week comment period after the public hearing was held pertaining to the SEJ.

1. The Department finds that the permit applicant followed the proper procedure for an operation proposed within a special protection watershed as required under 25 PA Code Chapter 93.

2. The Department has followed the procedures required for review of an application for an operator in a special protection watershed as required under 25 PA Code Chapter 93 using existing regulation, guidance, forms and processes in effect during the permit review period.

3. The Department has assured that cost-effective and reasonable best management practices for nonpoint source control are included for implementation [25 Pa. Code § 93.4c(b)(2)]
4. The application included consideration and evaluation of all non-discharge alternatives for the proposed discharge. [25 Pa. Code § 93.4c.(b)(1)(i)(A)]

HQ

5. The permit incorporates environmentally sound and cost-effective non-discharge alternatives.

6. (a) Non-discharge alternatives will be implemented but a point-source discharge is still anticipated.

7. The permittee has incorporated use of the best available combination of cost-effective treatment (ABACT), land disposal, pollution prevention, and wastewater reuse technologies (BMPs) to achieve a non-degrading discharge. The permittee has demonstrated that the resulting discharge will maintain and protect the existing quality of receiving waters with no degradation.

Details: SGI will implement a non-discharge alternative that include: (1) the installation of oversized ponds NT Pond Nos. 1 and 2 (outfall 001 and 002) and related drainage structures, (2) collection and transfer of water from the Northern Tract Pond System to the Lower Mill Pond System, and (3) the water use technologies that are part of the Lower Mill Pond System. The Northern Tract mine permit plan utilizes an alternative discharge location which will collect runoff from the Northern Tract area and discharge such waters to a non-specially protected watershed via the Lower Mill Three Pond System in all instances except for a storm that is of greater intensity or magnitude than a 100-year/24-hour storm event, when there would be the potential for a discharge via an auxiliary spillway to reach Toms Creek. As such, SGI has completed an SEJ for the potential discharges that may occur from outfalls 001 and 002.

8. The permittee made a sufficient demonstration that the resulting discharge will support the applicable existing and designated water uses (other than HQ uses) even with the proposed reduction in water quality and consulted with the Department regarding the requirements for a social or economic justification (SEJ) to discharge from this operation. The permittee sufficiently demonstrated in the subsequent SEJ request that lowering of water quality is necessary to accommodate important economic or social development in the area in which the waters are located.

Details: The NPDES permit No. PA0279617 NPDES Individual Permit Condition number 4 states that the operator must not cause or contribute to degradation of Unnamed Tributary to/and Toms Creek in the event of a discharge from the emergency spillways for outfalls 001 and 002. This condition also requires that the operator conduct sampling during a discharge event that will be evaluated to determine reasonable potential for an exceedance of the corresponding water quality criterion for TSS. Should a reasonable potential for an exceedance be established, water quality based effluent limits will be calculated and implemented during precipitation events, as described above, and the permit will be revised at that time to include these limits.

9. The Department considered the asserted beneficial social or economic development in light of, and weighed against, the reduction in water quality that the discharge and the proposed activity are projected to cause.
Details: The information contained in the SEJ application effectively demonstrated that the combination of water quality protection measures (non-discharge alternatives use scaled to account for all precipitation events less than a 100-year/24-hour storm), limited extent of geologic resource (the proposed Northern Tract Quarry is an extension of one of 12 existing quarries of similar geologic material in North America, and the only existing quarry of similar geologic material in the northeastern United States), and local economic benefit (the maintenance of 147 jobs, 91% of which are filled by employees who live within 30 miles of the proposed quarry location, and the payment of $255,000 in combined property and sales taxes to the local economy) meet the regulatory standard for social or economic justification for water quality degradation. It should be emphasized that the approval of this SEJ does not mean that water quality will be degraded, only that if some degradation were to take place, it would be socially and economically justified. This degradation would only be possible in the event of a precipitation event greater than a 100-year/24-hour storm.

SEJ considerations included the following as described in the Water Quality Anti-Degradation Implementation Guidance:

- Sensitivity of Water Use
- Nature of Pollutants
- Proposed Degree of Change in Water Quality
- Proximity to Wetlands or Floodplains
- Discharge Characteristics
- Reliability of Treatment Technology
- Effect on Public Need/Social Services
- Effect on Public Health/Safety
- Effect on Quality of Life
- Effect on Employment
- Effect on Tax Revenues
- Effect on Tourism
- Any other information that would explain why it is necessary to lower water quality to accommodate this proposed project

The Department published notice with the draft NPDES permit notification that an SEJ has been demonstrated and public input was considered in this decision to allow a reduction in water quality.

10. The Department approved the SEJ for the discharge, allowing a reduction in water quality. The following persons were involved in this process:

Details: After review by the permit reviewer(s)- Chadwick Paronish, P.G., and Thomas Nalisnick, P.E.- the SEJ was reviewed by the Permit Section supervisor Rock Martin, P.G. and the District Mining Manager David D. Thomas. Bureau of Mining Permits, Permit and Technical section, was consulted regarding the recommendation and agreed with the decision of the DMO staff.
11. The Department has issued the permit with discharge limitations designed to maximize protection of Tier 1 uses through the implementation of ABACT or WQBELs based on water quality criteria.