



January 26, 2023

Pennsylvania Department of Environmental Protection
Dam Safety Program
P.O. Box 8554
Harrisburg, PA 17105-8554
(484) 250-5970

Subject: New Hope Crushed Stone & Lime Company Quarry (DEP site 262547)/Primrose Creek Restoration
Act 14 Notice Response
6970 Phillips Mill Road
TMP# 41-028-010
Solebury Township
File No. 83-078

Dear Sirs,

This correspondence is intended to provide official response to the subject Act 14 notice and General Information Form (0210-PM-PIO0001 rev 10/2020) that was received via certified mail no. 7018 1130 0002 0087 4062 on December 28, 2022. The correspondence indicates that the project will restore approximately 435 linear feet of Primrose Creek to its approximate contours. PADEP invited the Township to review the attached documents and comment on the land use aspects of this project.

DISCUSSION:

1. The following comments are offered with respect to the GIF, signed by Michael Kutney on December 20, 2022:
 - A. Project Information Question 3 on page 3 (Have you addressed community concerns that were identified?) was answered with an answer of "N/A". Based on participation and minutes from various meetings, there are still unresolved community concerns.
 - B. Land Use Information Question 4 on page 4 (Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance?) was not answered. The municipality (Solebury Township) has an adopted Zoning Ordinance, which the proposed project does not appear in compliance with.
 - C. Land Use Information Question 5 on page 4 (Does the proposed project meet the provisions of the zoning ordinance or does the project have zoning approval?) was not answered. This question should be answered with a "No" response.
 - D. Coordination Information Question 4.0 on page 5 (Will the project involve a construction activity that results in earth disturbance?) was answered "Yes". Coordination Information Question 4.0.1 on page 5 (Total Disturbed Acreage) was answered "0.92 acres (435 feet x 92 feet)" response. The creation of the discharge channel ("stream restoration") in addition to the remaining grading/stabilization for the quarry reclamation project will most likely exceed 1 acre. Earth disturbance that exceeds one acre will likely require NPDES permit approval which may require federal project authorization; unless appropriate waivers are justified/obtained.
 - E. Coordination Information Question 5.0 on page 5 (Does the project involve any of the following: water obstruction and/or encroachment, wetland impacts, or floodplain project by the Commonwealth/political subdivision or public utility?) was answered with a "No" Response. This question should be answered with a "Yes" response, since the proposed activity involves an encroachment within a watercourse and floodplain.

- F. Coordination Information Question 5.1 on page 5 (Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?) was answered with a “No” Response. This question should be answered with a “Yes” response, since the proposed activity involves an encroachment within a watercourse and floodplain.
 - G. Coordination Information Question 5.2 on page 5 (Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?) was not answered. PADEP essentially classified the area downgradient of the discharge as “wetlands” during meeting discussions. The proposed quarry discharge/stream channel is directed toward the “wetland” area. Additional information should be provided to confirm that there are either no wetlands or no adverse impact to wetlands.
 - H. Coordination Information Question 5.3 on page 5 (Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?) was not answered. The proposed quarry discharge/stream channel is partially within and directed to a FEMA delineated 100 year flood zone. The proposed channel will become part of the Primrose Creek and will impact the 100 year mapped flood zone. Therefore, this question should be answered with a “Yes”.
 - I. Coordination Information Question 5.6 on page 6 (Does your project utilize Floodplain Restoration as a best management practice for Post Construction Stormwater Management?) was not answered.
 - J. Coordination Information Question 6.0 on page 6 (Will the project involve discharge of construction related stormwater to a dry swale, surface water, ground water or separate storm water system?) was answered with a “Yes” response.
2. From a land use standpoint, the proposed activity does not appear to comply with Township Zoning Ordinance as follows:
- A. The Solebury Township Zoning Ordinance (specifically Sections 27-2205.1.A(1) and 27-2205.1.D) prohibits alteration of floodplains (except in conformance with Part 21) and watercourses and their floodways. Complete information has not yet been submitted to demonstrate compliance with Part 21. For the latter, provisions of Riparian Corridor Overlay District (provided in Section 27-2208) shall additionally apply. Section 27-2206.3 requires floodplains, waters of Commonwealth/US and Riparian Corridor be protected pursuant to Part 22. Section 27-2208.2.B(4) classifies Primrose Creek and its tributaries as being part of the Riparian Corridor Overlay District. Section 27-2208.2.C(1) defines the extent of the Riparian Corridor Overlay district extending 75 feet from each defined edge of waterway or shall equal the extent of the 100 year floodplain, whichever is greater. The proposed “discharge channel” is an alteration (within the floodplain, watercourse, and riparian corridor) and a new use within a regulated floodplain and riparian corridor. Section 27-2208.5A thru 5D lists permitted and conditional uses which do not appear consistent with the proposed use. Section 27-2208.5.E prohibits any use or activity not authorized by Sections 27-2208.5A thru 5D. That said, if variance(s) were obtained for the proposed use; a Corridor Management Plan would still be required (pursuant to Section 27-2208.6.A) or as a condition of any granted relief.
3. From a land use standpoint, the proposed activity does not appear to comply with Township Floodplain Ordinance as follows:
- A. Plan should identify FEMA floodzone and reference FEMA Firm map.

- B. Pursuant to Section 8-602.1.C, no new construction or development shall be allowed, within any floodway area/district, unless appropriate permit is obtained from the PADEP.
 - C. Certification must be provided (from the registered professional engineer) indicating that the proposed development will result in no increase in the base (100-year) flood elevation. (Codified Ordinance, Section 8-302.1.A(1))
 - D. A document certified by a registered professional engineer or architect which states that the proposed construction or redevelopment has been adequately designed to withstand the pressures, velocities, impact and uplift forces associated with the base flood. Such statement shall include a description of the type and extent of flood proofing measures which has been incorporated into the design of the structure/improvement. (Section 8-204.3.D.(4))
 - E. If proposed earth disturbance exceeds 1,000 square feet, a "letter of adequacy" must be obtained from Bucks County Conservation District (BCCD) relative to erosion and sedimentation controls. (Section 8-204.3.D.(7))
4. Various additional land use items:
- A. Previous PADEP reclamation plans included an outlet control structure (and constructed berm to achieve a proposed water level elevation of 102.7 feet) to draw from a lower depth to help alleviate increases in runoff water temperature; which consequently may increase temperature of water in the downgradient watercourse. The previous outlet/control structure configuration also provided additional "built-in" storage capacity in the impoundment to alleviate adverse impacts during flooding conditions and high-intensity precipitation events. This current design does not address runoff temperature increases and seems more prone to impact base flow conditions of the downgradient watercourse.
 - B. **Previous PADEP reclamation plans targeted a quarry impoundment water surface level of 102.7 feet (MSL). The current design reduces the water level elevation to a quarry impoundment water surface level of 93.3 feet (MSL).** This site is located within Karst geology which may be sensitive to water level variations. Adjacent properties have experienced numerous sinkhole events. It does not appear that groundwater/Karst items have been considered in the design for the proposed channel/permanent water surface elevation. It further appears that the recently received design, prepared by Tetra Tech, is rather simplified and does not evaluate various items such as: previous quarry impoundment detention volumes, and comprehensive upstream/downstream property conditions. The Township requests that PADEP have an appropriate analysis be completed by professional consultants to evaluate the varied groundwater levels on the Karst geography to validate the design and to demonstrate that negative impacts are alleviated to the maximum extent possible.
 - C. There is a drop from the watercourse which enters the quarry impoundment and the proposed water surface elevation along the west wall of the quarry impoundment. It appears that this could result in a reduction in the groundwater table between pre-quarry and post-quarry reclamation conditions; especially for upgradient properties.
 - D. The discharge rates from a full quarry lake are anticipated to exceed runoff rates from the quarry operations; since the quarry pit functioned as a detention basin which alleviated peak runoff rates. It is important to note that increase in runoff/discharge rates could potentially result in adverse conditions and/or damages to downgradient properties/structures/watercourses.
 - E. The design of the proposed channel does not evaluate antidegradation or temperature considerations for the runoff.

- F. The reasoning behind the proposed location of the outfall and spillway are unclear (appear to be based on random soil boring locations). PADEP and/or their consultants should provide justification (based on sound engineering principles) on the proposed channel/watercourse location.
- G. The channel analysis does not evaluate how the proposed quarry lake and channel may differ from floodplain calculations prepared by FEMA to create the FIRM. With the entire quarry impoundment, now being full, it appears that additional flooding (during 100 year or other frequency flood events) could result to downgradient properties and municipal/state infrastructure (e.g. Chapel Road, River Road).
- H. The channel analysis does not evaluate the culvert structures on the downgradient PECO parcel to determine if the anticipated increase in runoff from post reclamation conditions (versus quarry impoundment basin conditions) may result in adverse impacts to downgradient properties/infrastructure.
- I. The proposal does not identify removal or regrading/seeding/stabilization of quarry berms. It appears that the quarry berms impact drainage and upland areas that drain to the quarry impoundment as well as areas that are tributary to the Primrose creek.
- J. SWM facilities/ACT 167 plan compliance/O&M Agreements/NPDES regulation compliance appears required for projects greater than 1 acre of earth disturbance.
- K. Project does not propose Riparian Forest Buffers pursuant to PADEP NPDES permit guidelines.
- L. Relatively flat ground slopes are proposed below the channel. The existing downgradient channel and the proposed transitions do not appear to be evaluated for hydraulic, hydrologic, and ecologic optimization.
- M. Project should be analyzed to demonstrate compliance with Stormwater Management Ordinance requirements.
- N. Property Owner and Applicant information must be clarified.
- O. Agreements should be put in place to identify Operation and Maintenance requirements (and party responsible for such) of proposed BMPs.
- P. Structure/channel stability. R-4 does not appear adequate. Structure/channel must be properly designed for stability, especially if water levels are elevated.
- Q. It does not appear that the PACODE Chapter 93 current stream designation of TSF has been evaluated in conjunction with the proposed channel project.
- R. It appears that due to rising impoundment water levels coupled with failure to design/install/complete reclamation activities; PADEP is implementing an emergency temporary "preferential channel"; which could have many of the adverse effects as the currently proposed channel.
- S. Recent information has been reported regarding a second impoundment that appears to have been created by the quarry activities which likely backs up water on adjacent parcels (e.g. TMP 41-022-075-004, 41-028-005-004) and requires reclamation. The proposed channel prevents access to the lower portion of the quarry property and reclamation of the second impoundment area; another potential oversight in the proposed channel design.
- T. It appears that the reclamation proposal and processes are still under development. As such, the Township reserves the right to provide further comments.

Memo to: PADEP

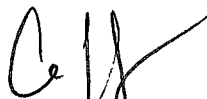
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While the Township appreciates PADEP's involvement in reclamation of the prior mining activities, it appears that various components have not been considered in the latest proposal. The Township urges PADEP to address the above items and community concerns before implementing a potentially deficient design.

Very Truly Yours,



Christopher Garges
Township Manager

CJG

cc: Zachary Zubris, Township Zoning Officer (via email)
Mark Freed, Esq., Township Solicitor (via email)
Curtis J. Genner Jr, PE, Township Engineer (via email)

