

January 10, 2024

Solebury Township
3092 Sugan Road, P.O. Box 139
Solebury Township, PA 18963
Christopher Garges, Township Manager

Dear Mr. Garges:

Thank you for your comment letter of January 26, 2023. The Department takes your comments very seriously and is providing the following responses to your comments. The following lists your comments in bold black font, pertinent zoning citation in blue font and the Department's responses to the comment in purple font.

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.**

Community concerns have been and continue to be addressed as presented to the Department.

- 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.**

This has been changed to "Yes".

This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

- 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.

This has been changed to "No".

This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

- 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 by 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.

This earth disturbance is related to and part of the reclamation for the entire mining permit. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act.

- 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.

This is changed to "Yes". This series of questions will be answered appropriately.

- 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.**

This is changed to "Yes"

This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act.

Per USACE Memorandum for Record dated April 25, 2023, the Primrose Creek Restoration Channel construction may be authorized by a PENNSYLVANIA STATE PROGRAMMATIC GENERAL PERMIT-6 (PASPGP-6) which will be issued by the Pottsville District Mining Office which may be issued by the Pottsville District Mining Office

- 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.**

This is changed to "No"

The Michael Baker International study, Primrose Creek Restoration, Hydrologic and Hydraulic Report demonstrates that there will be no-adverse impact to the wetland

- 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".**

This is changed to "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.**

This is changed to "Yes"

- 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.

This is changed to "Yes".

The Department is establishing natural flow to a stream that has been artificially maintained by pumping for nearly 30 years.

2. From a land use standpoint, the proposed activity does not appear to comply with Township Zoning Ordinance as follows:

The Solebury Township Zoning Ordinance (specifically Sections 27-2205.1. A (I)

Floodplain.

(I) Areas within the floodplain of the base flood shall not be altered, graded, filled or built upon except in conformance with Part 21, "Floodplain Conservation District." The floodplain area shall be those areas subject to the base flood as identified in the Flood Insurance Study, dated May 18, 1999, and the accompanying maps prepared by the Federal Emergency Management Agency, or the most recent revision thereof.

and 27-2205.1.D)

Streams, Watercourses, Waters of the Commonwealth, Lakes or Ponds. These areas include watercourses, streams or bodies of water and their floodways wholly or partly within or forming part of the boundary of this commonwealth and shall not be altered, graded, developed, filled, piped, diverted or built upon. In addition, the provisions of the Riparian Corridor Overlay District provided in § 27-2208 of this chapter shall apply

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.

The proposed activity is part of the overall reclamation plan of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

The Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report and the Tetra Tech Quarry Discharge Outlet Design shows compliance with Part 21.

For the latter, provisions of Riparian Corridor Overlay District (provided in Section 27-2208) shall additionally apply.

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act

The Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report and the Tetra Tech Quarry Discharge Outlet Design shows compliance with these provisions.

Section 27-2206.3 requires floodplains, waters of Commonwealth/US and Riparian Corridor be protected pursuant to Part 22.

All areas required to be protected under this Part and all land area required to be kept as open space or to otherwise be protected under the Township's ordinances shall be restricted from future development and/or subdivision, whether through deed restriction, easement, or other instrument that runs with the land in perpetuity and puts future landowners and occupants on notice of the restrictions and land to be protected. The document evidencing the restriction shall also state whether any conditional use approval was granted under § 27-2207, and the details of such approval, including the date of the approval and approval terms and conditions. Requests to amend or alter such restrictions by future landowners to disturb natural resources protected by this Part beyond that which is permitted in the restriction shall require conditional use approval from the Board of Supervisors under § 27-2207.

Section 27-2208.2.B (4) classifies Primrose Creek and its tributaries as being part of the Riparian Corridor Overlay District.

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

The Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report and the Tetra Tech Quarry Discharge Outlet Design shows compliance with these provisions.

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.

(1) The Riparian Corridor Conservation Overlay District shall extend a minimum of 75 feet from each defined edge of an identified waterway, water body or wetland at bank full flow or level or shall equal the extent of the base flood elevation, whichever is greater. [Amended by Ord. 2017-7, 8/15/2017]

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

The Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report and the Tetra Tech Quarry Discharge Outlet Design shows compliance with these provisions.

The construction of the Primrose Creek Restoration Channel is not a “new use” within the floodplain but the restoration of a previously existing use.

Section 27-2208.5A thru 5D lists permitted and conditional uses which do not appear consistent with the proposed use.

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

The Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report and the Tetra Tech Quarry Discharge Outlet Design shows compliance with these provisions.

However, the Construction of the Primrose Creek Restoration Channel Falls under Zone One; Uses Permitted by Right under 22-2208 5A. (3)

(3) Maintenance of the riparian corridor through the removal of invasive plants, removal of trash and solid waste, mitigation of soil erosion problems, and planting for the purpose of improving the riparian corridor vegetation.

and Zone Two: Uses Permitted by right under 22-2208 5C. (6)

(6) Removal of invasive plants, removal of trash and solid waste, mitigation of soil erosion problems, and planting for the purpose of improving the riparian corridor vegetation

Section 27-2208.5.E prohibits any use or activity not authorized by Sections 27-2208.5A thru 5D.

Note: Section-2208.5.E is not transcribed to this document

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

The Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report and the Tetra Tech Quarry Discharge Outlet Design shows compliance with these provisions.

However, the construction of the Primrose Creek Restoration Channel is not a prohibited use.

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.

Management of the Riparian Corridor District.

A. Corridor Management Plan. Within any riparian corridor area, no construction, development, use, activity, or encroachment shall be permitted unless a corridor management plan is submitted and approved by the Township Board of Supervisors and the effects of such development are mitigated by the implementation of the corridor management plan. The corridor management plan shall meet the following requirements:

(1) Existing conditions, including the boundaries of Zones One and Two, steep slopes, swales, wetlands, streams, ponds, floodplains, woodlands, other vegetation, and existing structures. A written description of unusual or significant conditions should also be included.

(2) Proposed activities, including a scaled plan which shows all proposed activities in Zone 1, Zone 2, and land adjacent to the corridor. The plan shall differentiate areas that will be disturbed from those that will be protected and preserved.

(3) Proposed management, including a discussion of how the purposes of this chapter will be met given the proposed activities. The plan shall specify when the construction, planting, or other activities are to begin and end and shall address long and short-term maintenance, and improvement activities necessary for preservation of the corridor, removal of invasive plants, spacing and types of newly planted trees and shrubs, mowing schedules, farming practices, and other related functions.

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

The Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report and the Tetra Tech Quarry Discharge Outlet Design shows compliance with these provisions.

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 flood zone and reference FEMA Firm map.

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

However, the Department contracted Michael Baker International to perform an analysis of the downstream floodplain to ensure no negative effects will be the result of the reconstruction of the stream. Their results may be found in the draft Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report.

The Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report and the Tetra Tech Quarry Discharge Outlet Design shows compliance with these provisions.

- 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.

Within any floodway area/district (refer § 8-302, Subsection 1A), no new construction or development shall be, allowed, unless the appropriate permit is obtained from the Department of Environmental Protection Regional Office.

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

Per USACE Memorandum for Record dated April 25, 2023, the Primrose Creek Restoration Channel construction will be authorized by a PENNSYLVANIA STATE PROGRAMMATIC GENERAL PERMIT-6 (PASPGP-6) which may be issued by the Pottsville District Mining Office.

- 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 (I))

The identified floodplain area shall consist of the following specific areas/districts:

The floodway area/district identified as floodway in the FIS which represents the channel of a watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without any increase in the water surface elevation at any point. This term shall also include floodway areas which have been identified in other available studies or sources of information for those special floodplain areas where no floodway has been identified in the FIS.

(1) Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

(2) No new construction or development shall be allowed, unless a permit is obtained from the Department of Environmental Protection Regional Office.

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

However, the Michael Baker International study, Primrose Creek Restoration, Hydrologic and Hydraulic Report shows that there will be no increase in the 100-year flood plain. The study also shows that no additional structures will be impacted.

Per USACE Memorandum for Record dated April 25, 2023, the Primrose Creek Restoration Channel construction may be authorized by a PENNSYLVANIA STATE PROGRAMMATIC GENERAL PERMIT-6 (PASPGP-6) which may be issued by the Pottsville District Mining Office.

- 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)).**

The following data and documentation:

(1) If available, information concerning flood depths, pressures, velocities, impact and uplift forces and other factors associated with a base flood.

(2) Detailed information concerning any proposed floodproofing measures and corresponding elevations.

(3) If available, information concerning flood depths, pressures, velocities, impact and uplift forces and other factors associated with a base flood; and floodway area (see § 8-302, Subsection 1A) when combined with all other existing and anticipated development, will not increase the base flood elevation at any point.

(4) A document, certified by a registered professional engineer or architect, which states that the proposed construction or development 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 have been incorporated into the design of the structure or the development.

The Primrose Creek Restoration Channel as designed by Tetra Tech, Inc. will provide the required information.

- 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))

(7) Where any excavation or grading is proposed, a plan meeting the requirements of the Department of Environmental Protection to implement and maintain erosion and sedimentation control.

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry. This activity is authorized and regulated under the Pennsylvania Noncoal Surface Mining and Conservation Act. Zoning ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

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.

The ultimate outlet/control structure elevation will be determined by the elevation of the historic natural ground surface at the East Side of the abandoned quarry pit. Impoundment of water in the abandoned quarry pit above the elevation of natural ground surface will constitute the establishment of a Class C1 Dam. The Department does not intend to construct a dam requiring a permit at the New Hope Quarry site.

PADEP has conducted additional geotechnical investigations in coordination with Tetra Tech and had extensive discussions with Tetra Tech regarding raising the outlet elevation. The revised outlet elevation will be between the range of 95' to 98' MSL depending on final field observation of the elevation of native ground. The resulting outlet elevation is expected to improve sinkhole risk mitigation while returning primrose creek to a more natural condition. Based on additional exploration of the site, the quarry outlet is expected to be at approximately 98 feet MSL.

- 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.

Karst features have been considered in establishing the quarry outlet elevation and it has been determined that the ultimate deciding factor of quarry outlet elevation will be the avoidance of creating a dam at the quarry site. In order to avoid creating an artificial dam at the quarry site, the depth of excavation of the Primrose Creek channel will be determined by the elevation of the interface between native ground and quarry fill.

PADEP has conducted additional geotechnical investigations in coordination with Tetra Tech and had extensive discussions with Tetra Tech regarding raising the outlet elevation. The revised outlet elevation will be between the range of 95' to 98' MSL depending on final field observation of the elevation of native ground. The resulting outlet elevation is expected to improve sinkhole risk mitigation while returning primrose creek to a more natural condition.

- 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 ground water table between pre-quarry and post-quarry reclamation conditions; especially for upgradient properties.

The vertical distance of the drop from the Western wall water course to the quarry pit water elevation will be determined by the elevation of natural ground at the Eastern side of the quarry. Per the Tetra-Tech Survey of October 3, 2022, the Western wall Primrose Creek Channel elevation is 104.12' MSL. The elevation at the Eastern side of the quarry is projected to be between 95' and 98' MSL. This would be a maximum difference of 9' which is well within natural ground water fluctuation range in karst geology.

- 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.

Per both the preliminary Tetra Tech Quarry Discharge Outlet Design and the draft Michael Baker International Study, Primrose Creek Restoration, Hydrologic and Hydraulic Report study, the quarry will continue to attenuate Primrose Creek flows for a 100-year storm and a greater percentage for lesser storms.

- E. The design of the proposed channel does not evaluate antidegradation or temperature considerations for the runoff.

The now reclaimed and water filled Warner Co., Cedar Hollow Quarry at Devault, Chester County is similar to the New Hope Crushed Stone Quarry in drainage area 1400 acres vs 1100 acres and the Quarry Outfall feeds an unnamed tributary to Valley Creek in East Whiteland and Tredyffrin Townships.

Since the quarries closure and filling, this unnamed tributary as well as Valley Creek are classified as a Class A Trout Stream and supporting Wild Brown Trout Fishery and Trout Natural Reproduction. Given the similarities, the Department expects that Primrose Creek will experience a similar outcome.

From discussion with Dan Ryan – PAFBC.

- 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.

The location of the outfall was determined by it being the shortest distance (hence least excavation) between the quarry pit and downstream Primrose Creek. The elevation of the quarry outlet will be determined by the elevation of natural ground. The random soil boring locations were used to determine the elevation of natural ground surface in order to project excavation quantities.

The second round of test pit locations were selected to further investigate the historic location and elevation of Primrose Creek. These locations were jointly approved by PA DEP and the Solebury School representatives.

- 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).

The Michael Baker International Study "Primrose Creek Restoration – Hydrologic and Hydraulic Report show that there will be no increase in the floodplain due to the quarry filling and overflowing.

- 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.

There are four downstream culverts that the Downstream Primrose Creek passes through. Based on the Michael Baker study, the attenuating effects of the water filled quarry will have the following effects as compared to the pre quarry conditions.

<u>River Station</u>	<u>Station Location</u>	<u>Culvert Size</u>	<u>100-Year Storm Effect on the Culvert</u>
165.41	Delaware River	10'	Similar to Pre-Quarry Conditions
2029.15	Phillips Mill Road	Box	Less than Pre-Quarry Conditions
3713.58	PECO	48"	Less than Pre-Quarry Conditions
4101.25	PECO	48"	Less than Pre-Quarry Conditions

- 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

The berms will be graded and seeded according to the existing mining permit reclamation plan for the quarry. Drainage from these areas is included in the Michael Baker International Study "Primrose Creek Restoration – Hydrologic and Hydraulic Report

- J. SWM facilities/ ACT 167 plan compliance/O&M Agreements/NPDES regulation compliance appears required for projects greater than 1 acre of earth disturbance.

Per USACE Memorandum for Record dated April 25, 2023, the Primrose Creek Restoration Channel construction may be authorized by a PASPGP-6 which be issued by the Pottsville District Mining Office.

- K. Project does not propose Riparian Forest Buffers pursuant to PADEP NPDES permit guidelines.

Per USACE Memorandum for Record dated April 25, 2023, the Primrose Creek Restoration Channel construction may be authorized by a PASPGP-6 which will be issued by the Pottsville District Mining Office.

Existing riparian buffer areas will be minimally disturbed. The project when finished will create a riparian area and floodplain where one has not existed for over 30 years.

- 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.

The channel gradient downstream of the proposed channel has been examined in the Michael Baker International Study "Primrose Creek Restoration – Hydrologic and Hydraulic Report and evaluated for hydraulic, hydrologic and ecologic effects.

The proposed channel will not increase the 100-year floodplain.

- M. Project should be analyzed to demonstrate compliance with Stormwater Management Ordinance requirements.

The proposed activity is part of the overall reclamation of the New Hope Crushed Stone Quarry and under regulation by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act. Stormwater management ordinances are preempted by the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act.

N. **Property Owner and Applicant information must be clarified.**

The present owner of the property is the New Hope Crushed Stone and Lime Co., Inc. The applicant for the project is the Pennsylvania Department of Environmental Protection.

O. **Agreements should be put in place to identify Operation and Maintenance requirements (and party responsible for such) of proposed BMPs.**

All BMP's will be according to requirements contained in the Pennsylvania Noncoal Surface Mining Conservation and Reclamation Act with the PA DEP responsible according to the act.

P. **Structure/ channel stability. R-4 does not appear adequate. Structure/ channel must be properly designed for stability, especially if water levels are elevated.**

Per the Tetra Tech original channel design submitted in January 2023 with a slope of 0.055 ft/ft and a maximum depth of 2.5 feet in a 100-year storm, R-4 was adequate.

Depending on the elevation of natural ground, the final slope may be between 0.010 and 0.016 ft/ft. The water depth over the Rip Rap is still expected to be no more than 3.0 feet in a 100-year storm. Given the maximum slope, R-5 will be required and will be installed

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.**

The Department does not propose any change to the current stream designation. Restoration of flow will ensure that the TSF designation will be supported.

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.**

The temporary preferential channel was cut in to make a preferential flow path should an emergency situation arise. The Department intends the permanent channel will have no adverse effects but will instead have positive effects on the downstream flow of Primrose Creek

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.**

The adjacent property already has a channel to the quarry and flow from this area is unrestricted.

- T. It appears that the reclamation proposal and processes are still under development. As such, the Township reserves the right to provide further comments.**

Noted.

Sincerely,



Richard E. Tallman P.E.
Environmental Engineer
Bureau of District Mining Operations

cc: John Stefanko, Deputy Secretary
Alicia Duke, Office of Chief Council
Randy Shustack, Director
Michael Kutney, P.G., DMM
Tiffany Folk, P.G., Acting EGM
Greg Greenfield, Environmental Program Manager
Lisa Strobridge, P.G. Local Government Liaison
Stephanie Berardi, Regional Communications Manager
Christopher Garges, Solebury Township Manager
Solebury Township
Bucks County
File
MS1-Solebury (1-22)

RET:cmb