MODULE 1

REPLACE THE EXISTING MODULE 1 WITH THE DOCUMENT PROVIDED HEREIN
# LARGE NONCOAL (INDUSTRIAL MINERALS) MINE PERMIT APPLICATION

Before completing this form, read the step-by-step instructions provided with this Permit Application Package.

## SECTION A. APPLICANT INFORMATION

<table>
<thead>
<tr>
<th>Applicant Name</th>
<th>Specialty Granules LLC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailing Address</td>
<td>1455 Old Waynesboro Road</td>
</tr>
<tr>
<td>(Street # and Name or P.O. Box)</td>
<td></td>
</tr>
<tr>
<td>(Address Line 2)</td>
<td>Blue Ridge Summit</td>
</tr>
<tr>
<td>(City)</td>
<td>PA</td>
</tr>
<tr>
<td>(State)</td>
<td>17214</td>
</tr>
<tr>
<td>(Zip Code + Four)</td>
<td></td>
</tr>
<tr>
<td>Telephone #</td>
<td>717-794-2184</td>
</tr>
<tr>
<td>Ext.</td>
<td>717-794-5248</td>
</tr>
<tr>
<td>(FAX #)</td>
<td>717-794-5248</td>
</tr>
<tr>
<td>Surface Mining Operator’s License #</td>
<td>6982</td>
</tr>
</tbody>
</table>

Application Contact:

<table>
<thead>
<tr>
<th>Mcclure</th>
<th>Matthew</th>
<th>S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Last Name)</td>
<td>(First Name)</td>
<td>(MI)</td>
</tr>
<tr>
<td>Executive Director Operations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mailing Address:

<table>
<thead>
<tr>
<th>Hagerstown</th>
<th>MD</th>
<th>21742</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Street # and Name or P.O. Box)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(City)</td>
<td>(State)</td>
<td>(Zip Code + Four)</td>
</tr>
<tr>
<td><a href="mailto:MMcclure@specialtygranules.com">MMcclure@specialtygranules.com</a></td>
<td>(301) 393-8825</td>
<td>Ext. 301.733.4003</td>
</tr>
<tr>
<td>(Email Address)</td>
<td>(Telephone #)</td>
<td>(FAX #)</td>
</tr>
</tbody>
</table>

## SECTION B. DESCRIPTION OF ACTIVITY

<table>
<thead>
<tr>
<th>Application Type</th>
<th>☑ New</th>
<th>☐ Revision/Modification</th>
<th>☐ Renewal</th>
<th>☐ Transfer</th>
<th>Permit Number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Mining Activity(ies)</td>
<td>☑ Surface Mining</td>
<td>☐ Underground Mining (Includes Surface Effects of Underground Mining)</td>
<td>☐ Incidental Coal Extraction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Other (specify)</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

## SECTION C. SITE INFORMATION

<table>
<thead>
<tr>
<th>Operation/Site Name</th>
<th>Northern Tract Quarry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation/Site Location</td>
<td></td>
</tr>
<tr>
<td>County(ies)</td>
<td>Adams</td>
</tr>
<tr>
<td>Municipality(ies)</td>
<td>Hamiltonban Twp.</td>
</tr>
</tbody>
</table>
SECTION C. (continued)

### Operation/Site Location

- **U.S.G.S. Map Name(s)**: Iron Springs 7.5' Quadrangle

  - Map Coordinates (center of proposed permit area)
    - Latitude: 39° 46' 03"
    - Longitude: -77° 26' 25"

  - Method of latitude/longitude collection: Google Earth
  - Horizontal accuracy (feet/inches)

- **Name or route number of nearest state/township road and a description of the location of the road that provides access to the operation**:
  - *Facility is accessed off of Charmian Road which is off of PA Route 16.*

### Name(s) of receiving stream(s)/Chapter 93 Classification

- Tom’s Creek, Unnamed Tributaries to Tom’s Creek: HQ-CWF, MF

### MSHA Mine I.D. No

- 3603460

### Extent of Mining

#### Mining Area

<table>
<thead>
<tr>
<th>List Rock/Mineral to be Mined</th>
<th>Acres of Rock/Mineral Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metabasalt</td>
<td>63.0</td>
</tr>
</tbody>
</table>

- **Total surface acres to be affected by rock/mineral removal**: 63.0
- **Total underground acres to be affected by rock/mineral removal**: 0

#### Remining

- **Total acres of abandoned mine land (i.e., open pits, refuse/spoil piles, surface area affected by underground mining) to be reaffected**: 0

#### Processing Facility

- **Total acres to be affected**: 0

#### Wetlands

- **Total acres of wetland to be affected by mining**: 0
- **Total acres of wetland to be replaced**: 0

### Permit Area (total acres of mining and support)

- 112.3 (see breakdown below)

- 63.0 acres of mining
- 22.0 acres of support/operational buffer (E&S controls, access roads, etc.)
- 27.3 acres of maintained buffer (only activity permitted is to add/replace damaged/ dead trees).
SECTION D. PERMIT COORDINATION  (or provide GIF form 8000-PM-IT0001)

1. Will this noncoal mining project involve the crushing and screening of noncoal minerals other than sand and gravel?  
   *All material mined from this site will be crushed and screened at adjacent West Ridge Quarry, SMP 6477SM5, or Pitts Quarry SMP 01930302.*  
   (Mellott Company, a contract operator engaged by SGI, is currently conducting crushing operations using a mobile crushing unit on the area covered by SMP 01930302).
   - Yes  
   - No

2. Will this noncoal mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations (crushing and/or screening) processing unconsolidated materials with a rated capacity of less than 150 tons/hour?
   - Yes  
   - No

3. Will this noncoal mining project involve the construction, operation and/or modification of a portable mineral processing plant?
   - Yes  
   - No

4. Will underground tanks for storage of fuel or chemicals be located within the proposed permit area?
   - Yes  
   - No

<table>
<thead>
<tr>
<th>SECTION E. APPLICATION FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>New Permit Applications</td>
</tr>
<tr>
<td>☑️ New large surface mining permit – with groundwater pumping</td>
</tr>
<tr>
<td>☐️ New large surface mining permit – without groundwater pumping</td>
</tr>
<tr>
<td>☐️ New underground mining permit</td>
</tr>
<tr>
<td>Permit Revisions</td>
</tr>
<tr>
<td>☐️ Major amendment to large surface mining permit – with groundwater pumping</td>
</tr>
<tr>
<td>☐️ Major amendment large surface mining permit – without groundwater pumping</td>
</tr>
<tr>
<td>☐️ Minor amendment</td>
</tr>
<tr>
<td>☐️ Major amendment underground mining permit</td>
</tr>
<tr>
<td>☐️ Transfer of large surface or underground permit</td>
</tr>
<tr>
<td>WATER OBSTRUCTIONS AND ENCROACHMENT (Fee is for each, include multiples in total)</td>
</tr>
<tr>
<td>☐️ Stream enclosure</td>
</tr>
<tr>
<td>☐️ Channel change</td>
</tr>
<tr>
<td>☐️ Bridges and other water obstructions in a stream or floodway with a drainage area of greater than 100 acres</td>
</tr>
<tr>
<td>☐️ Encroachments</td>
</tr>
<tr>
<td>☐️ Small projects as defined in 25 Pa Code section 105.1</td>
</tr>
<tr>
<td>☐️ General Permit for Temporary Road Crossings for Moving Surface Mining Equipment BMR-GP-101</td>
</tr>
<tr>
<td>☐️ General Permit for Access Road Crossing BMR-GP-102</td>
</tr>
</tbody>
</table>
| ☐️ Class C dam as defined in 25 Pa Code Section 105.91 | $1,500

Total $20,225

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1 No fee is required if the dam has a contributing drainage of 100 acres or less, the greatest depth of water at maximum storage elevation is 15 or less and the maximum impounding capacity is 50-acre feet or less.
## SECTION F. CONSULTANT

<table>
<thead>
<tr>
<th>Shusko</th>
<th>Robert</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Last Name)</td>
<td>(First Name)</td>
<td>(MI)</td>
</tr>
<tr>
<td>President</td>
<td>D'appolonia</td>
<td></td>
</tr>
<tr>
<td>(Title)</td>
<td>(Name of Consulting Firm)</td>
<td></td>
</tr>
</tbody>
</table>

**Mailing Address**

701 Rodi Road, Floor 2

<table>
<thead>
<tr>
<th>Pittsburgh</th>
<th>PA</th>
<th>15235-4559</th>
</tr>
</thead>
<tbody>
<tr>
<td>(City)</td>
<td>(State)</td>
<td>(Zip Code + Four)</td>
</tr>
<tr>
<td><a href="mailto:rmshusko@dappolonia.com">rmshusko@dappolonia.com</a></td>
<td>(412) 229 - 1585</td>
<td>(412) 856 - 9535</td>
</tr>
<tr>
<td>(E-mail Address)</td>
<td>(Telephone #)</td>
<td>(Fax #)</td>
</tr>
</tbody>
</table>

## SECTION G. LAND USE INFORMATION

Complete the following for new permits and major revisions that include new surface area.

1. Is there an adopted county or multi-county comprehensive plan?  [ ] Yes  [ ] No

2. Is there an adopted municipal or multi-municipal comprehensive plan?  [ ] Yes  [ ] No

3. Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal ordinance?  [ ] Yes  [ ] No

If "Yes" is answered to questions 1, 2, or 3, complete 4, 5, and 6.

4. Does the project meet the provisions of the zoning ordinance or does the proposed project have zoning approval?  [ ] Yes  [ ] No

5. Applicants are encouraged to submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances. Have you submitted local municipal and county approval letters* for this mining project with this permit application?  [ ] Yes  [ ] No

   (If yes, please attach the local municipal and county approval letters.)

6. Have you addressed any concerns from the local municipal and county prior to submitting the application to the Department?  [ ] Yes  [ ] No

   (If yes, please attach all correspondence addressing the concerns.)

* If Municipal and County Land Use Letters are not included, the applicant should demonstrate that they attempted to obtain the letters. A copy of correspondence sent by the applicant via Certified Mail to the municipality (addressed to the municipal secretary with a copy to the township supervisor chair) and to the county (addressed to the county planning office with a copy to the county commissioners) to request Municipal and County Land Use Letters within 30 days of receipt should be included with this form.

## SECTION H. ADDITIONAL RELATED INFORMATION

Name and Address of Public Office where a copy of this application is on file for public review.

Adams Co. Conservation District
670 Old Harrisburg Road, Suite 201
Gettysburg, PA 17325

Have arrangements been made to publish notice of this application in a local newspaper of general circulation in the locality of the proposed mining activities?  [ ] Yes  [ ] No

Name of newspaper where the public notice advertisement will appear: **The Gettysburg Times**

Attach a copy of the proposed public notice (see instructions for sample notice containing suggested wording and content).
<table>
<thead>
<tr>
<th>SECTION H. (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide the following (if applicable to this proposed operation):</td>
</tr>
<tr>
<td>Pre-Application No. 01170301</td>
</tr>
<tr>
<td>Notice of Intent to Explore No.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Application Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attach the results of the Pennsylvania Natural Diversity Inventory (PNDI)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION I. AFFIDAVIT (§77.107)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Maryland, County of Washington</td>
</tr>
<tr>
<td>I, Justin P. Dunlap, being duly sworn, according to law, depose and say that I (am the applicant) (am an officer or official of the applicant) (have the authority to make this application) and that the plans, reports and documents submitted as part of the application are true and correct to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (cross out inapplicable portions in parenthesis)</td>
</tr>
<tr>
<td>Sworn and Subscribed to Before Me This</td>
</tr>
<tr>
<td>26th Day of December 2017 2018</td>
</tr>
<tr>
<td>Signature of Applicant or Responsible Official</td>
</tr>
<tr>
<td>Justin P. Dunlap</td>
</tr>
<tr>
<td>Name (Typed)</td>
</tr>
<tr>
<td>13424 Pennsylvania Ave. Suite 303, Hagerstown, MD 21742</td>
</tr>
<tr>
<td>Address</td>
</tr>
</tbody>
</table>

Notary Public |
My commission March 14, 2023
PERSON(S) AUTHORIZED BY APPLICANT TO PREPARE THIS APPLICATION

The application, plans, reports and specifications shall be certified by a registered professional engineer, registered professional geologist or registered professional land surveyor, as appropriate. Geologic and hydrogeologic information must be certified by a registered professional geologist. Impoundments requiring a 25 Pa Code Chapter 105 permit or having a storage capacity of equal to or greater than 20 acre-feet; and final contours/grading other than approximate original contour in conjunction with achieving an alternate postmining land use must be certified by a registered professional engineer. Impoundments which do not require a Chapter 105 permit or have a storage capacity of less than 20 acre-feet must be certified by a registered professional engineer or a registered professional land surveyor.

Registered Professional Engineer

I, Robert M. Shusko, do hereby certify to the best of my knowledge, information and belief, that the application, plans, specifications and reports have been prepared in accordance with accepted practice of engineering, are true and correct, and are in accordance with the Rules and Regulations of the Department of Environmental Protection. I further certify that it is within my professional expertise to verify the correctness of the information. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature

Address 701 Rodi Road, Floor 2

Pittsburgh, PA 15235-4559

Telephone No. 412-856-9440

Registered Professional Geologist

I, Douglas J. Hess, do hereby certify to the best of my knowledge, information and belief, that the application, plans, specifications and reports have been prepared in accordance with accepted practice of geology and hydrology, are true and correct, and are in accordance with the Rules and Regulations of the Department of Environmental Protection. I further certify that it is within my professional expertise to verify the correctness of the information. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature

Address 449 Eisenhower Blvd., Suite 300

Harrisburg, PA 17111

Telephone No. 717-232-0593

Registered Professional Land Surveyor

I, do hereby certify to the best of my knowledge, information and belief, that the application, plans, specifications and reports have been prepared in accordance with accepted practice of land surveying and engineering land surveys, are true and correct, and are in accordance with the Rules and Regulations of the Department of Environmental Protection. I further certify that it is within my professional expertise to verify the correctness of the information. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature

Address

Telephone No.

APPLICATION FORM CERTIFICATION

Complete the following if the application is submitted on forms other than the original Department Forms.

Registered Professional Engineer, Registered Professional Land Surveyor or Registered Professional Geologist

I, ______________________________ (Engineer's/Surveyor's/Geologist's Name - Print or Type) being a registered professional engineer/registered professional land surveyor or registered professional geologist (circle as appropriate) do hereby certify that the forms used in the accompanying application have been reproduced under my supervision and are a facsimile of the forms prepared by the Department. I am aware that there are significant penalties for altering the content of the Department's forms, including the possibility of fine and imprisonment.

Signature __________________________ Date ____________ Seal
MODULE 10

REPLACE THE EXISTING MODULE 10 WITH THE DOCUMENT PROVIDED HEREIN
Module 10: Operational Information
[§§77.452/77.456/77.563/77.564]

10.1 Equipment and Operation Plan

For each phase of mining, identify the type and method of mining; engineering techniques; major equipment to be used; starting point; and the anticipated sequence in which the phases are to be mined.

The Northern Tract Quarry will be developed in three phases which will include some initial mining activities to extract the upper portion of metabasalt, followed by the primary quarry development. Initial site development (Phases 1 through 3) will generally consist of incrementally installing erosion and sediment (E&S) controls, incrementally completing clearing and grubbing activities, then removing overburden soil and cap rock (weathered metabasalt). Phase 1 will primarily include the establishment of two collection ditches which will encompass the upper portion of the Northern Tract Quarry and direct stormwater runoff back into the existing Pitts Quarry. Overburden soil and cap rock within the collection ditch perimeter can then be removed to facilitate mining of the metabasalt in the upper section of the Northern Tract Quarry. As overburden soil removal and mining continue, Phase 2 development will primarily consist of establishing a stormwater pond (NT Pond No. 1) and related collection ditches on the western perimeter of the Northern Tract Quarry to further increase accessibility to facilitate continued mining through incremental clearing and grubbing activities and the removal of overburden soil and cap rock material. Phase 3 will consist of establishing a stormwater pond (NT Pond No. 2) and related collection ditches on the eastern perimeter of the site, and will facilitate mining of the Northern Tract Quarry to its full extents (Primary Quarry Development) as depicted in the Exhibit 9 Operations Map. Refer to Modules 12 and 13 for further detail of the site development sequence and the related E&S controls.

The Northern Tract Quarry will be accessed internally through SGI property by roads developed though or around the existing Pitts Quarry. Overburden soil and cap rock will be removed and stored in designated storage areas respectively. Stockpiled overburden soils will be hydro-seeded with a PADEP approved seed mix. Overburden soils may also be used in concurrent reclamation activities in the adjacent Pitts Quarry.

Once erosion and sediment controls described above are in-place and functional in contributory drainage areas, the quarry will be developed using open pit best mining/engineering practices to achieve the desired highwall/bench configuration. Drilling and blasting techniques (largely similar to those conducted in adjacent Pitts Quarry) will be used to break the rock which is then loaded and transported by haul trucks (approximately 1/2 mile) to the primary crushing facility located on the adjoining surface mine permit (6477SM5). More information is provided in Exhibits 16 and 17 regarding specific blasting techniques proposed for the Northern Tract Quarry permit area. Major equipment used will include track excavators, front end wheel loaders and 35- to 85-ton off-road haul trucks. Support for mining and hauling activities may be provided by dozers, track hoes, and excavators. Mining will generally proceed in a northerly direction from the Pitts Quarry towards the north via a junction at the existing 5th level (elevation 1090' MSL) until the eastern, western, and northern limits of the extraction area are reached.

NT Pond Nos. 1 and 2 will be established to control runoff from the Northern Tract Quarry area during initial disturbance and overburden soil removal. As the quarry is expanded, the area of runoff to each pond will be incrementally reduced. Therefore, the ponds will likely be eliminated as the quarry reaches its full lateral extent and their corresponding areas of runoff are eliminated. Prior to removal of NT Pond Nos. 1 and 2, a revised E&S plan will be submitted to the PADEP showing the proposed E&S control features for the pond removals since it is critical to prevent any erosion and drainage from the mining area discharging into Tom's Creek (HQ-CWF, MF) or the Unnamed Tributary to Tom's Creek. The NPDES Permit may have to be revised.

10.2 Pit Configuration

a) Identify the maximum depth of mining and the elevation of the pit floor at the maximum depth of mining for each mining phase.

SGI intends to mine down to the 12th level (elevation 740' MSL). The maximum depth of mining in the proposed permit area is approximately 490 feet, as the highest elevation in the Northern Tract Quarry is approximately 1,230' MSL (there may be some temporary benching at the uppermost elevations).
b) If mining consolidated rock, identify the maximum highwall height and the benching interval to include the distance between the benches measured vertically (i.e. height of the working face of the bench) and the width of the benches.

Maximum highwall height is 50 feet with the exception of the uppermost bench, which may be 65 feet in height; minimum width of the benches is 25 feet, but may be as wide as 40 feet.

c) If mining consolidated rock and the reclamation plan is an alternative to approximate original contour involving restoration of the pit floor and final working face, identify the total acreage of pit floor and final graded slopes.

The total acreage of pit floor and graded slopes is approximately 63 acres.

10.3 Existing Structures

Identify and describe the intended use of all existing structures or facilities to be used in connection with or to facilitate mineral removal activities. (Common existing structures include impoundments, stream crossing facilities, water obstructions and processing waste dams.)

Not Applicable (N/A). There are no existing structures in the Northern Tract Quarry permit area.

10.4 Overburden Piles

Provide a narrative plan for reclamation of overburden piles specifying the timing and extent of overburden piles returned to the pit and final grading of the overburden pile areas for blending into existing contours.

Overburden from the Northern Tract Quarry permit area may be stored in existing stockpiles on the adjacent Pitts Quarry (SMP 01930302) and West Ridge (SMP 6477SM5) Permit Areas, placed in temporary stockpiles within the Northern Tract Quarry permit area, or used in reclamation of the Pitts Quarry. A portion of the overburden soils/caprock piles may be returned to the pit for use in reclamation upon depletion of the rock reserve to the 12th level (elevation 740’ MSL) of the mine plan. If quarrying proceeds to the final depth in an area that can safely be reclaimed without affecting future mining operations or sterilizing future reserves, the area will be reclaimed as soon as practical.

Any overburden soils in excess of what is required to meet site reclamation requirements that is located in any excavated/borrow areas within the existing approved overburden/cap rock reclamation areas will be shaped (per the permitted reclamation surface), stabilized, and vegetated with the approved permanent seed mixture.

10.5 Final Grade and Drainage

Identify the final grading and drainage pattern, including topographic contours on Exhibit 18 and a description of compaction and stabilization techniques. Provide cross-sections or a contour map showing permit line setback(s), final postmining slopes, postmining watertable and safety benches.

The proposed quarry reclamation plan will result in an unmanaged water impoundment surrounded by forestland as the post-mining land use. Reclamation of the quarry will consist of blasting the highwalls and re-grading the quarry slopes with a bulldozer to grades of 35 degrees or less down to at least 50 feet below the final projected water level. Results of the Groundwater Model Report (which is being finalized and will be submitted with the formal application) indicate a projected final static water level of 1,020’ MSL. The re-graded, non-inundated slopes will be covered with the stored overburden soil as the growing medium and revegetated/planted according to Module 23. Compaction will be accomplished with a dozer and slopes will be seeded to achieve stabilization. The success of the proposed reclamation is based on obtaining a quick growth of temporary grasses (annual ryegrass and small grain) on non-inundated side slopes to prevent loss of overburden soil by erosion before the permanent grasses, trees, and other natural vegetation are established. The reforestation plan for the non-inundated side slopes and support areas consists of planting at least two types of trees (early-successional species for wildlife and soil stability and commercially valuable crop trees), and using proper tree planting techniques. See Exhibit 18 and cross-sections for reclamation contours for the various options.
10.6 Reclamation Timetable

Provide a sequence of operations for the accomplishment of major stages in the reclamation plan demonstrating compliance with the concurrent reclamation requirements in 25 Pa Code 77.595. Include an estimated timetable for reclamation which is tied to the mining phases and the termination of mineral extraction.

Development of the proposed quarry will be dependent on specific site conditions encountered during construction, weather, market demand for the aggregate products, and related factors. However, rough estimates of the required time to complete each major phase of development are provided herein:

- Initial Site Development and Overburden Removal – 2 to 4 years
- Level 3 Development (Cap Rock Removal) – 1 to 2 years
- Level 4 Development – 1 to 2 years
- Level 5 Development – 4 to 6 years
- Level 6 Development – 6 to 8 years
- Level 7 Development – 6 to 8 years
- Level 8 Development – 5 to 7 years
- Level 9 Development – 4 to 6 years
- Level 10 Development – 3 to 5 years
- Level 11 Development – 2 to 4 years
- Level 12 Development – 2 to 3 years

Concurrent reclamation will take place to the fullest extent possible that active operations allow and as described in 10.4. Final reclamation will occur upon cessation of mining at the property. No exposed highwalls will remain in the pit following reclamation. The sequence for accomplishment of primary reclamation activities is as follows:

1. Reduce highwall slopes to 35 degrees or less through blasting and partial backfilling, regrade with overburden soils, and vegetate with a mixture of temporary and permanent grasses. Plant in accordance with Module 23.
2. Remove all equipment that may be in the permit area.
3. Regrade support areas.
4. Revegetate applicable support areas.
5. Reclaim and revegetate all appropriate erosion and sediment control structures.

Final Reclamation is anticipated to require roughly 2 to 3 years to complete.

10.7 Identification of Toxic Materials

When applicable (e.g., noncoal operation in coal measures) provide a detailed description of the methods used in the identification of potentially acid and toxic forming materials (boney, rooster, blossom or other inferior coal and noncoal strata) which will be encountered and separately handled. Correlate and identify these strata in the test hole data.

N/A
10.8 **Special Handling of Toxic Material**

When applicable (e.g. noncoal operation in coal measures) provide a detailed description of the methods to be used in the separation and handling of acid and toxic forming materials. Include transportation, storage, treatment and return of the material to the backfill. Identify the amount and source of clean fill to be placed above and below the material and the compaction and other methods to preclude combustion of the material and prevent groundwater contamination. Indicate all disposal areas on Exhibits 9 and 18.

N/A

10.9 **Oil and Gas Wells**

Where mining activities are proposed to be conducted within 125 feet of any oil or gas well, identify the location on Exhibits 6, 9 and 18 and provide a description of the activity. Provide a demonstration that the well has been sealed; or describe the measures to be taken to insure the integrity of the well, access to the well at all times and the well operator's consent to the proposed activity.

N/A

10.10 **Wells, Exploration Holes and Bore Holes**

Identify the type and location of wells, exploration holes, bore holes and monitoring wells and provide a description of the manner in which each will be cased, sealed or otherwise managed.

The locations of the monitoring wells and test borings within the Northern Tract Quarry permit area are shown on Exhibit 6.2. SGI will use several of the monitoring wells throughout the life of the quarry but will seal monitoring wells and test borings in accordance with standard geotechnical practice per 25 PA Code Chapter 77.503 at the appropriate time.

10.11 **Underground Mines**

Where proposed surface mining activities will be conducted within 500 feet of any point of either an active or abandoned underground mine (coal or noncoal), provide a description of the nature, timing, and sequence of the operation. Identify the location of each underground mine opening and the manner in which the opening will be sealed or otherwise managed including appropriate cross sections and design specifications for mine seals. Provide a description of the potential hydrologic impacts of the proposed activities, the effects on the existing groundwater system, and the effect the proposed activities will have upon abatement of pollution or the elimination of hazards to the health and safety of the public.

A relatively small cavern associated with an abandoned exploration adit from an attempted copper mining operation exists near the center of the Northern Tract Quarry. The location of this feature is depicted on Exhibit 6.2, 9.1, and 18. This cavern is located within the overburden/cap rock material that will be removed with development of the quarry. Given that the cavern will be removed, the cavern will have no potential hydrologic impacts and no effects to the existing groundwater system. Operations to remove the cavern will occur within the proposed erosion and sediment control features at the site to control potential sources of pollution. The cavern will not present a hazard to the health and safety of the public given that it will be removed.
10.12 Public Highways

Where opening or expansion of pits are proposed within 100 feet of the outside right-of-way of a public highway, or a relocation of a public highway is proposed, identify the name and section of the public highway involved, a description of the activities to be conducted and detailed plans and cross-sections of the proposed activities. Include the written approval of the government agency having jurisdiction over the highway.

(Note: If the initial public notice advertisement does not contain a notice of the variance request, attach the proof of publication for advertisement of the variance.)

N/A

10.13 Public Parks and Historic Places

Where the proposed mining activities may affect any public park or historic place, provide a demonstration of the measures which will be taken to minimize or prevent adverse impacts.

N/A

10.14 Utilities

Where the proposed mining activities may adversely affect services provided by oil, gas, and water wells; oil and gas pipelines; railroads; utility lines; and water and sewage lines, provide a demonstration of the measures which will be taken to minimize or prevent these impacts.

The northwestern portion of the proposed permit area is bisected by an existing natural gas right-of-way under the ownership of Columbia Gas (depicted on Exhibit 9); however, it is located outside of the proposed extraction area. A 200-foot offset for blasting activities from the gas line is being observed by SGI.
MODULE 10 – BOND CALCULATION SUMMARY

REPLACE THE BOND CALCULATION SUMMARY WITH THE DOCUMENT PROVIDED HEREIN
## BOND CALCULATION SUMMARY-NONCOAL CONSOLIDATED

<table>
<thead>
<tr>
<th>Operation (see attached calculations)</th>
<th>Quantity</th>
<th>Units</th>
<th>Rate $/Unit</th>
<th>Bond Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining Area (i.e. minor grading/vegetation)</td>
<td>32.7(1)(2)</td>
<td>Acres</td>
<td>$3,500</td>
<td>$114,450</td>
</tr>
<tr>
<td>Support Area (revegetation)</td>
<td>15.8(2)</td>
<td>Acres</td>
<td>$1,900</td>
<td>$30,020</td>
</tr>
<tr>
<td>Spoil Storage/Earthmoving</td>
<td>830,023</td>
<td>Cubic yards</td>
<td>$1.20</td>
<td>$996,028</td>
</tr>
</tbody>
</table>

### Highwall Blasting

- **Up to 20 ft Height**: - Linear foot - -
- **>20 up to 30 Height**: - Linear foot - -
- **>30 up to 40 Height**: 184 Linear foot $40 $7,360
- **>40 up to 50 Height**: 10,685 Linear foot $55 $587,675
- **>50 Height**: - Linear foot - -

### Mine Sealing

- **Calculation**: 2 No of Ponds $3,800 $7,600

### Demolition of Structures

- **Lump Sum Calculation**: $107,600 $107,600

### Large Tires

- **Each**: - - - -

### Other Costs

- **-**: - - - -

### Mobilization/Demobilization

- **Lump Sum Calculation**: $40,000 $40,000

### Total Reclamation Cost

- **$1,890,733**

### Notes:

1. This is the acreage from the outer most limits of the mining area to quarry El. 940.0 (excludes mining area beyond 50 feet below final water level (El. 1020.0) which will be inundated). The El. 940.0 highwall will require blasting to meet the reclamation slopes requirement (50 feet minimum) below the final water level.

2. A portion of the mining area and support area associated with reclamation of Northern Tract extends past the Northern Tract Quarry permit boundary, into the Pitts Quarry permit boundary. Acreage may vary from other modules.
MODULE 14

REPLACE THE EXISTING MODULE 14 WITH THE DOCUMENT PROVIDED HEREIN
Module 14: Streams/Wetlands
[Chapter 105/§77.504/§77.523]

Note: The United States Army Corp of Engineers (Corps) authorizes a Pennsylvania State Programmatic General Permit – 4 (PASPGP-4) when there will be a discharge of dredged or fill materials, or the placement of both temporary and/or permanent structures, which individually or cumulatively result in impacts to 1.0 acre or less of waters including wetlands. Projects will be sent to the Corps as a Category III activity for review. The Commonwealth has issued 401 Water Quality Certification for projects eligible under PASPGP-4.

If there will be a discharge of dredged or fill materials, or the placement of both temporary and/or permanent structures, which individually or cumulatively result in impacts to more than 1.0 acre of waters including wetlands, or such activities are otherwise ineligible for a PASPGP-4, the Corps may require an individual permit in accordance with Section 404 of the Clean Water Act and separate 401 Water Quality Certification.

Stream/Wetland encroachments may also require authorization from the US Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act. If this project requires a federal permit, you may be eligible for either PASPGP-4 authorization or you must file a separate application with the Corps. If you require a permit and are not eligible under the PASPGP-4 you must request a Section 401 Water Quality Certification from the Department using module 14A "Request for Federal Clean Water Act (CWA) Section 401 Certification for Mining Activities."

Does this project require a permit from the Corps? ☐ Yes ☒ No

If no, explain why not. No discharge of dredged or fill materials, or the placement of temporary or permanent structures into Waters of the United States, including wetlands, is being proposed by the mining plan.

14.1 Mining Activities Within 100 Feet of a Stream/Stream Relocation/Channel Change

If the mining activities are proposed within 100 feet of an intermittent or perennial stream, including haul road crossings, or the relocation or channel change of an intermittent or perennial stream provide the following information: (Note: Variance request for these and the expansion of pits must be included in the proof of publication. A separate Module 14.1 should generally be completed for each proposed encroachment.)

Not Applicable (N/A) - The proposed mining and support activities will avoid direct and indirect impacts to streams. All mineral extraction activities are planned to occur a minimum distance of approximately 300 feet from the nearest stream. Additionally, the planned drainage control features at the site are designed such that no discharges to Toms Creek and its adjacent tributaries will occur except for storms of greater magnitude or intensity than the 100-year storm. Additional detail regarding the drainage features is provided in Modules 12 and 13. Furthermore, the quarry development of the Northern Tract Quarry is not anticipated to affect the groundwater related base flow in Toms Creek or its adjacent tributaries, as discussed in Module 8.

a) Name and location of the stream; and location, length, and acreage disturbed by the proposed activities (Identify the location of the proposed activities on Exhibits 9 and 18);

b) A narrative giving a description and the purpose and justification of the proposed activities;

c) A description of the character of the stream bed and banks, and a profile of the stream for a reasonable distance above and below the proposed site showing bed slopes, normal and flood water surfaces and a description of the riparian vegetation including a characterization of the resident aquatic community, a description of the riparian vegetation and an assessment of the probable hydrologic consequences of the proposed activities on the water quality and quantity and the resident aquatic community. Provide the name(s), address(es) and telephone number(s) of the individual(s) responsible for the collection and analysis of this data and provide a description of the methodologies used to collect and analyze the data;

d) A stream profile for the existing and proposed channel for a reasonable distance upstream, downstream and within the proposed change, showing bed slopes, pool-riffle ratios, normal and flood water surfaces, and existing obstructions;

e) A hydrologic and hydraulic analysis which shall include:
   1. data on size, shape and characteristics of the watershed;
2. the size and frequency of the design storm;
3. the hydraulic capacity of any structures or replacement channel;
4. the hydraulic capacity of the channel upstream and downstream of the structure or the relocation/channel change;
f) Where a bridge, culvert or other water obstruction is proposed, provide the following information:
   (Note: General Permit (BMR-GP-102) is available for construction of access roads.)
   1) Plans and details showing the location, type, size, and height of the structure;
   2) A narrative description of the construction methods and sequence including water handling during construction, and erosion and sedimentation controls;
   3) Indicate if the structure will be temporary or permanent (include plans for removal of temporary structures).

   g) For a Channel Change or Stream Relocation: N/A

   A detailed plan and cross-sections of the existing and proposed channel upstream, downstream and within the proposed channel change showing the limits and configuration of the proposed activities, dimensions, channel linings, and normal and flood water surfaces;

   A description of the construction methods and sequence including: water handling during construction, erosion and sedimentation controls, and measures to be taken to prevent adverse impacts to water quality and quantity, water users and the aquatic communities.

   h) A characterization of the existing water quality and quantity of the stream including downstream water uses, and 25 Pa Code Chapter 93 Protected Water Use Classification.

14.2 Wetland Related Information

   a) Provide the name(s), address(es), telephone number(s) and qualifications of the person(s) who made the determination if wetlands exist within the proposed permit area.

   Andrew Brookens
   Skelly and Loy, Inc.
   449 Eisenhower Blvd., Suite 300
   Harrisburg, PA 17111
   717-232-0593
   B.S., Biology, 1993, Shippensburg University of Pennsylvania
   USACE Baltimore District, Certified Wetland Delineator; USFWS Recognized Qualified Bog Turtle Surveyor

   b) Show the location of wetlands on Exhibits 6.2, 9 and 18. Wetlands within the proposed permit area are shown on Exhibits 6.2, 9, and 18. All of these wetlands are located outside of the limit of disturbance (for both mining and support activities). No direct impacts to wetlands will occur.

   c) What is the total wetland acreage (which will be affected) for the proposed permit area?

   0 acres.

   d) Provide responses to the following for each wetland which will be affected by the proposed mining activities: None of the wetlands will be directly affected by the proposed mining activities. Indirect impacts to Wetland D may occur as a result of the proposed project, as described in 14.3 below. An additional narrative regarding possible indirect wetland impacts is provided as Attachment No. 1 to the SEJ.

      Exceptional Value Wetland Characteristics

      1) Does the wetland serve as habitat for flora and fauna listed as
"threatened" or "endangered" under the Endangered Species Act of 1973, Wild Resource Conservation Act, Fish and Boat Code, or Game and Wildlife Code?  

☐ yes  ☒ no

2) Is the wetland hydrologically connected to or located within 1/2 mile of the wetlands identified in d)1) and does it maintain the habitat of the "threatened" or "endangered" species within the wetlands identified in d)1) above?  

☐ yes  ☒ no

**NOTE:** If this wetland is located more than 1000 feet from the permit area, show its location (and the location of the wetland that is hydrologically connected to or located within 1/2 mile of) on the Exhibit 6.1 Map.

3) Is the wetland located in or along the floodplain of a wild trout stream (as designated by the Pennsylvania Fish and Boat Commission), or the floodplain of a tributary to a wild trout stream?  

☐ yes  ☒ no

4) Is the wetland located in or along the floodplain of a stream listed as exceptional value (under 25 Pa Code Chapter 93) or the floodplain of a tributary to an exceptional value stream?  

☐ yes  ☒ no

5) Is the wetland within the corridor of a waterway which has been designated as a wild or scenic river in accordance with the Wild and Scenic Rivers Act of 1968 or the PA Scenic Rivers Act?  

☐ yes  ☒ no

6) Is the wetland part of, or located along, an existing public or private drinking water supply and does it maintain the quality or quantity of the drinking water supply?  

☐ yes  ☒ no

7) Is the wetland located in areas designated by the Department as "natural" or "wild" areas within state forest or park lands?  

☐ yes  ☒ no

8) Is the wetland located in areas designated as Federal wilderness areas under the Wilderness Act or the Federal Eastern Wilderness Act of 1975?  

☐ yes  ☒ no

9) Is the wetland located in areas designated as National natural landmarks by the Secretary of the Interior under the Historic Sites Act of 1935?  

☐ yes  ☒ no

**NOTE:** If a "yes" response is indicated for any question in d)1) through d)9), the wetlands would be "exceptional value" (as defined in 25 Pa Code Section 105.17) and a demonstration must be made that the requirements of subsection (a) of 25 Pa Code Section 105.18(a) have been met.

Wetland Functions

10) Does the wetland serve natural biological functions, including food chain production; general habitat; and nesting, spawning, or resting sites for aquatic or land species?  

☒ yes  ☐ no

11) Does the wetland provide areas for study of the environment, or as sanctuaries or refuges?  

☒ yes  ☐ no

12) Does the wetland aid in, or maintain natural drainage characteristics, natural water filtration processes, current (flow) patterns or other environmental characteristics?  

☒ yes  ☐ no

13) Does the wetland serve as storage areas for flood and storm waters, or does it shield other areas from erosion or storm damage?  

☒ yes  ☐ no

14) Does the wetland provide a groundwater recharge area that maintains minimum baseflows?  

☒ yes  ☐ no

15) Does the wetland serve as a prime natural recharge area where surface water and groundwater are directly connected?  

☒ yes  ☐ no

16) Does the wetland aid in the prevention of pollution?  

☐ yes  ☒ no

17) Is the wetland used for, or does it provide the opportunity to be
14.3 Wetland Impact Analysis/Assessment

a) Describe the alternatives to the proposed mining activities that have been considered to avoid or minimize impacts on wetlands. An alternative analysis should include alternatives to the proposed mining activities, including alternative locations, routings or designs to avoid adverse impacts on the wetlands (e.g. relocating spoil/topsoil storage areas, rerouting haul roads).

The proposed mining and support activities will avoid direct impacts to wetlands, as all mineral extraction is planned to occur a minimum distance of 200 feet from the wetlands. All support activities (erosion and sediment control structures, access roads, stockpiles, etc.) will be located within the Operational Buffer which is located a minimum of 42 feet away from the nearest wetland (Wetland D). As discussed in detail in the SEJ that was submitted in support of this application, many alternatives were examined related to siting of the proposed mining operations. Siting of the Northern Tract Quarry permit area is constrained primarily by the location of the geologic formation planned for mineral extraction. The primary constraint is the presence of metabasalt rock which defines the location of the quarry operation. In turn, secondary constraints govern the location of some of the components of stormwater management features associated with those operations. Such secondary physical constraints include: property boundaries, required regulatory setbacks, utilities and infrastructure, and the conservation buffers mandated under the Conditional Use permit issued by Hamiltonban Township. The maximum operationally possible buffers/setbacks have been proposed and will be maintained separating wetland areas from mining and support activities.

Adequate erosion and sediment controls will be in-place and functional prior to earth disturbance activities in contributory areas, and no water will be discharged to the wetland areas. The only potential indirect impact to Wetland D would be related to the potential for water loss as a result of both the reduction in the run-off area (watershed) and the predicted decrease in elevation of the water table (especially in the western edge of Wetland D) adjacent Wetland D caused by the dewatering of the proposed quarry.

b) Discuss whether any of the alternatives are practical to achieve the basic purposes of the project taking into account availability, cost, technology and logistics of the other possible project sites which would not affect the wetlands.

N/A

c) For any wetlands within the proposed permit area, provide the following:

1) Identify and delineate the wetland and the areal extent of the impact (wetlands must be identified and delineated in accordance with 25 Pa Code Section 105.451 Identification and delineation of wetlands – statement of policy).

Potential jurisdictional wetlands and watercourses were identified and delineated in the field by Skelly and Loy on December 16, 2015. The field investigation identified five potentially jurisdictional wetland habitats (Wetlands A through E, shown on the permit exhibits) within the Northern Tract Quarry; however, as stated previously, these wetlands are located outside of the proposed mining and support areas and no direct impacts are anticipated. A copy of the Jurisdictional Wetland-Watercourse Identification/Delineation And Phase I Bog Turtle Habitat Assessment Report is attached to this permit application with the PNDI correspondence located behind Module 1.
2) Submit a cross-sectional view showing the wetland and the proposed mining area.

   See attached Exhibit 14.3 sheets.

3) Explain how the proposed mining activities will directly affect the wetlands.

   N/A. Proposed mining activities will not directly affect the wetlands. Best Engineering/Management Practices will be employed for stormwater runoff control design and installation.

   aa) If the proposed mining activities will affect less than 1.0 acre of wetland and the wetland is not an exceptional value wetland (in accordance with 25 Pa Code Section 105.17), provide a description of the wetland functions which will be impacted by the proposed mining activities. Note: If a "yes" response is indicated for any question in Module 14.2 d)1) through d)9), the wetlands would be exceptional value (as defined in Section 105.17).

      N/A.

   bb) If the proposed mining activities will affect 1.0 or more acres of wetlands or may affect an exceptional value wetland, provide a detailed assessment of the wetland functions identified in Module 14.2 d)10) through d)17).

      N/A

d) If any wetlands within the proposed permit or adjacent area will be indirectly affected (e.g. altering the wetland hydrology), provide the following:

1) Identify and delineate the wetland and provide an estimate of the total wetland acreage affected (wetlands must be identified and delineated in accordance with 25 Pa Code Section 105.451 Identification and Delineation of Wetlands – statement of policy).

   Wetland D has been identified and delineated and is depicted on the permit mapping. The acreage of Wetland D within the permit boundary is 1.2 acres, which is generally the portion delineated by Skelly and Loy; however the total acreage of Wetland D is approximately 4.1 acres, as some of it extends beyond the permit boundary and was delineated previously by others.

2) A description of how the proposed mining activities will indirectly affect the wetlands.

   There is a potential for water loss as a result of both the reduction in the run-off area (watershed) and the predicted decrease in elevation of the water table (especially in the western edge of Wetland D) adjacent Wetland D caused by the dewatering of the proposed quarry. No indirect effects to Wetlands A, B, C, and E due to hydrologic alteration are anticipated from the development of the proposed Northern Tract Quarry. The hydrologic sources to these wetlands are primarily associated with the surface water and seasonal groundwater interflow contributed from the Unnamed Tributary to Toms Creek. Portions of Wetland C are associated with seepage along the lower hillside slope adjacent the floodplain of the Unnamed Tributary (UNT) to Toms Creek. In contrast to Wetland D, indirect impacts to the hillside groundwater seepage hydrology attributed to Wetland C are not anticipated due to the distance of the seepage at Wetland C from the proposed quarry pit, as well as the location of the Wetland C seepage at the toe of hillside slope rather than on the hillside like Wetland D. Also, the source of hydrology to Wetland C is
primarily from the unnamed tributary to Toms Creek, while the seepage is believed to be a limited component.

The groundwater model simulations suggest that impacts related to diminished baseflow (bedrock groundwater recharge) to existing wetlands and the UNT corridor as a result of lowering the regional potentiometric surface will be negligible during development of the Northern Tract Quarry. The underlying metabasalt and metarhyolite geology within the area has a very low permeability and severely limits the movement of groundwater moving through these formations.

However, this analysis also suggests that these bedrock conditions most likely facilitate the movement of water over the ground surface. Thus, any appreciable loss of runoff area (watershed) and contributory overland flow could result in indirect hydrologic effects to receiving downslope aquatic resources. Approximately 65% of the existing contributory drainage area to two hillside-associated wetland habitats within the Northern Tract Quarry mine permit boundary, Wetland C and Wetland D, may be removed as a result of the ultimate quarry development.

Wetland D is an expansive habitat extending well beyond the proposed Northern Tract Quarry mine permit boundary. The sustenance of other sources of runoff area outside of the Northern Tract Quarry mine permit boundary are anticipated to ameliorate much of the effects of contributory drainage area loss within the Northern Tract. However, some amount of indirect effects due to the loss of contributory drainage area may occur to Wetland D.

Wetland C is substantially smaller in size, and is predominantly situated within the floodplain of the UNT to Toms Creek. The western extent of Wetland C is situated at an elevation approximately 55' lower and roughly 200' closer to the UNT to Toms Creek than the western extent of Wetland D. Due to a very limited amount of this habitat being situated on the hillside slope, the remaining upslope runoff area following development of the Northern Tract Quarry may continue providing sufficient hydrology to sustain this portion of the wetland. Given Wetland C’s proximity to the UNT to Toms Creek, and the fact that the UNT to Toms Creek itself acts as a barrier to any indirect dewatering effects from proposed quarry development, the UNT to Toms Creek will continue to provide a sustaining source of flow/hydrology to this component of Wetland C. As supported by the groundwater modeling results, the hydrology associated with the UNT to Tom’s Creek is not expected to be diminished by dewatering of the proposed Northern Tract Quarry or loss of contributory drainage area.

Although the existing Pitts Quarry is located further from Wetlands C and D than the proposed Northern Tract Quarry, it is important to note that there have been no reported impacts to the hydrology of Wetlands C and D related to the operation of the Pitts Quarry. Therefore, the effects of the proposed Northern Tract Quarry development on the wetlands and UNT corridor will likely be limited to the extent that surface runoff and shallow groundwater interflow in the upper soil horizons will be reduced to Wetland D by removing a portion of the wetland’s natural upslope drainage area. The sustenance of other sources of runoff area to Wetland D outside of the Northern Tract Quarry mine permit boundary are anticipated to ameliorate much of these effects.
e) Will the cumulative impact of the proposed and anticipated mining activities result in a major impairment of the wetland resource in the general area? □ yes ☒ no

Provide an explanation of the determination and identify any contacts with state or federal agencies involved in making the determination.

The proposed mining and support activities will avoid direct impacts to wetlands, as all mineral extraction is planned to occur a minimum distance of 200 feet from the wetlands. Due to Wetland D’s limited hydrologic contribution to the Toms Creek drainage basin, any resulting impact to Wetland D from indirect hydrologic effects is expected to result in insignificant effects to the functions, values, and quality of the Toms Creek drainage basin.
14.4 Wetland Mitigation/Replacement

Note: If a total of one-half (.5) acres or less of wetlands will be affected, participation in Pennsylvania’s Wetlands Replacement Project may be authorized by the Department in lieu of onsite replacement of the wetlands. N/A

a) If wetland mitigation measures or wetland replacement are proposed, address the following:

1) Identify the wetlands where mitigation measures will be employed.

A botanist will conduct a comprehensive vegetation survey of Wetland D to document current baseline conditions, including a Prevalence Index and FAC Neutral Test score. These indices help characterize the vegetative condition of the wetland community with respect to the hydrophytic indicator status ranks for the existing vegetation. The prevalence index is a weighted-average of the wetland indicator status of all plant species in the wetland. The FAC-Neutral test is a summation of the number of dominant plants with a “Wet” indicator status versus those with a “Non-wet” indicator status. By establishing a baseline condition, future monitoring could provide a comparison to determine if a change in the wetland vegetative community has occurred. Biannual (twice per year) vegetative monitoring is proposed for Wetland D during mining activities. If there would be a change in the hydrologic condition to the subject wetland due to the proposed quarry project, it would be expected to be evinced in a change in the vegetative community (i.e. if drier hydrologic conditions develop, then drier uplands plants inhabit the area). If impacts to Wetland D are apparent, biannual vegetative monitoring will commence in Wetlands A and C. A mitigation strategy will be developed in coordination with the Department should impacts be realized.

2) Identify the wetlands that will be replaced and the location of the replacement wetland site. Provide the number of acres for each wetland to be replaced and the acreage of the replacement wetland.

As discussed in 14.4 a 1) above, a monitoring program is proposed. Should the results of this independent study reveal impacts to Wetland D, the applicant will compensate in coordination with the Department at a 1:1 ratio.

3) Provide a plan for mitigation/replacement following the guidelines in the Department’s technical guidance titled “Design Criteria - Wetlands Replacement Monitoring” document 363-0300-001. This guidance is available from the Division of Waterways, Wetlands and Erosion Control, Post Office Box 8854, Harrisburg, Pennsylvania 17105-8554 or through the Department’s website.

If determined to be warranted, an appropriate compensatory wetland mitigation plan including the location of proposed compensatory activities will be coordinated with the Department. The compensatory wetland mitigation plan would be consistent with the Department’s design criteria technical guidance.

Show the location of replacement wetland sites on the Operations Map (Exhibit 9) and the Land Use and Reclamation Map (Exhibit 18).

Note: At a minimum, wetland replacement must be at a 1:1 ratio (replacement acres: affected acres). The Department may require the ratio to exceed 1:1 based on the functions and values of the wetlands to be affected. Wetland replacement sites will generally not be approved unless the site is located within the same general area as the existing wetland to be replaced.

14.5 United States Army Corp of Engineers Permits

a) If the United States Army Corp of Engineers (Corps) requires a Pennsylvania State Programmatic General Permit – 4 (PASPGP-4) for your proposed activity: N/A

Completed and attach the “PASPGP-4 Cumulative Impacts Project Screening Form (3150-PM-BWEW0050)” and supporting documents listed below.

1) the PASPGP-4 Cumulative Impact Project Screening Form (3150-PM-BWEW0050);

2) Exhibits (pdf format):

a) U.S.G.S. Map 6.1 (site location map),
b) Environmental Resources Map 6.2,
c) Operations Map 9,
d) Land Use and Reclamation Map 18, and
e) a CD or DVD with any plans that are larger than 8 ½ by 11 inches.
3) Module 1: Large Noncoal (Industrial Minerals) Mine Permit Application

4) Module 14 and any detail drawings for stream / wetland encroachment activities (including Form 14A, Request for Federal Clean Water Act (CWA) Section 401 Certification For Mining / Coal Refuse Disposal Activities).

5) the Endangered Species Act /Pennsylvania Natural Diversity Inventory receipt,

6) the Pennsylvania Historical and Museum Commission correspondence (Section 106 coordination)
FORM 14A - Request for Federal Clean Water Act (CWA) Section 401 Certification For Mining / Coal Refuse Disposal Activities

General requirements: A mining or coal refuse disposal activity that involves encroachment into a stream or wetland requires a DEP mining activity permit and a US Army Corps of Engineers (Corps) permit issued pursuant Section 404 of the Federal Clean Water Act (FWPCA). An applicant proposing this type of activity must file a state mining activity permit application with the DEP district mining office and a separate federal permit application with the Corps district office.

Need for a Section 401 certification: As a matter of coordination, the Corps district office will not issue the federal Section 404 permit until DEP issues an Individual Water Quality Certification pursuant to Section 401 of the FWPCA, certifying that the activity will comply with the provisions of sections 301-303, 306 and 307 of the FWPCA and will not violate applicable federal and state water quality standards. The DEP district mining office issues this certification based on the information presented in the state permit application, public comments received with respect to the state permit application, and consultation with the Corps district office in regard to the federal permit application.

To ensure timely processing of both state and federal permit applications, the applicant is encouraged to:

- Contact the Corps district office to determine if a Section 404 permit is required for the proposed activity, and what type of permit is needed (an individual permit or nationwide permit).

- Complete and submit this form with the state mining activity permit application to the DEP district mining office.

Applicant ____________________________ Application No. ____________________________
Address __________________________________ Operation Name ____________________________
Telephone ____________________________ Municipality ____________________________
County ____________________________

Section 1: Corps Determination:

This project requires 401 certification for:

[ ] An individual 404 permit
[ ] Modification to an existing 404 permit
[ ] Authorization to operate under Nationwide Permit No. ____________________________

Section 2: Activity Description:

Please describe the activities that are the subject of this request:

_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

If the scope of activities (including any mitigation to be performed as compensation for the unavoidable impacts of fill placement) proposed under the federal permit application is the same as the scope of activities proposed under the state permit application, check here [ ] and provide the application number assigned by the Corps ____________________________ and the date on which the application was filed ____________________________.
If the scope of activities described under the federal permit application differs from the scope of activities described under the state permit application, attach a copy of the federal permit application.

Note that any substantial revisions required as part of the federal application review process must be provided to the DEP district mining office.

Section 3: Signature(s)

I (am the applicant) (am an officer of the applicant) (have the authority to file a Section 404 application for this project) and certify that the plans, reports and documents submitted as part of the application are true and correct to the best of my knowledge and belief, I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Note: Cross out inapplicable portions in parenthesis).

______________________________
Signature of Applicant or Responsible Official

______________________________
Name (typed)

______________________________
Title