

Summary of Work Completed by Hanson Aggregates Pennsylvania, LLC to Update the Mining Permit with DEP beginning in January, 2018.

A. 01/22/2018: DEP Letter

1. DEP requested updates to the following Modules within 30 days of 01/22/2018:
 - a. Module 9 – Operations Map
 - b. Module 10 – Operations Information
 - c. Module 12 – Erosion & Sedimentation Controls
 - d. Module 16 – Large Noncoal Blast Plan
 - e. Module 17 – Air Pollution and Noise Control Plan
 - f. Bonding Increment Application with updated bonding calculations

2. DEP requested updates to the following Modules within six (6) months of 01/22/2018
 - a. Module 3 – Ownership/Compliance
 - b. Module 4 – Areas Where Mining is Prohibited or Limited
 - c. Module 5 – Property Interests/Rights of Entry
 - d. Module 6 – Environmental Resources Map
 - e. Module 7 – Geology
 - f. Module 8 – Hydrology
 - g. Module 13 – Impoundments/Treatment
 - h. Module 14 – Streams/Wetlands
 - i. Module 18 – Land Use and Reclamation Map
 - j. Module 19 – Land Use/Vegetation
 - k. Module 20 – Post-mining Land Use and Reclamation
 - l. Module 21 – Topsoil-Subsoil
 - m. Module 23 – Revegetation

B. 02/20/2018: Permit Update package submitted to DEP by EarthRes Group, Inc.

1. This permit update package to DEP included the following:
 - a. Module 1 – Application for Large Noncoal Surface Mining Permit (customary to include with all submissions of permit modules)
 - b. Module 9 – Operations Map

- c. Module 10 – Operational Information
- d. Module 12 – Erosion & Sedimentation Controls
- e. Module 16 – Large Noncoal Blast Plan
- f. Module 17 – Air Pollution and Noise Control Plan
- g. Bonding Increment Application with updated bonding calculations

C. 03/20/2018: DEP Acceptance of Applications letter acknowledging receipt of the 2/20/2018 permit update package and checks in the amount of \$475 (Large Noncoal Blast Plan) and \$1,150 (\$700 for Minor Permit Amendment and \$450 for Bonding Increment).

D. 04/06/2018: Permit Update – Response to Comments package prepared by EarthRes Group, Inc.

1. Based upon 03/05/2018 & 03/15/2018 meetings with DEP and hand-written comments provided by Joseph S. Blyler, Jr., P.E. (DEP Mining Engineer), the following updated plans were submitted:

- a. Module 9 – Operations Map
- b. Module 12 – Erosion and Sedimentation Controls
- c. Design Calculations
- d. E&S Plans
- e. E&S Details

E. 05/03/2018: DEP Technical Deficiencies Letter

- 1. DEP identified certain deficiencies in the following:
 - a. Application No. 7974SM1C9, NPDES PA0594121 Renewal (need complete PPC Plan)
 - b. Application No. 7974SM1C11, Minor Revision
 - i. Updated Module 6 – Environmental Resources Map
 - ii Updated Module 7 – Geology
 - iii Updated Module 8 – Hydrology
 - iv Updated Module 8.1a – Background Monitoring
 - v. Modifications to the E&S Plan (Module 12) as per remarks of DEP Mining Engineer resulting from meetings of 03/05/2018, 03/15/2018 and 04/16/2018.

- vi. Updated maps as per E&S Plan modifications
 - vii. Updated Module 14 – Streams/Wetlands
 - viii. Updated Module 19 – Land Use/Vegetation
 - ix. Updated Module 20 – Post-mining Land Use and Reclamation
 - x. Updated Module 21 – Topsoil/Subsoil
 - xi. Updated Module 23 – Revegetation
- c. Application No. BI 24143-7974SM1-02 Bond Increment
 - i. Update Bonding Map to reflect the E&S Plan
 - ii. Provide Cross-sections showing existing and proposed final pit profile and water elevations
 - iii. Revise bonding calculations to reflect changes to E&S Plan

2. Note: The majority of modules DEP asked to be updated were in the process of being updated and were not due to DEP until late July 2018.

F. 05/22/2018: Permit Update – Response to Comments package prepared by EarthRes Group, Inc.

- 1. Based upon 04/16/2018 & 05/04/2018 meetings with DEP, the following updated plans were submitted:
 - a. Revised Module 9 – Operations Map
 - b. Revised Module 12 – Erosion and Sedimentation Controls
 - i. Design Calculations
 - ii. E&S Plans
 - iii. E&S Details

G. 06/07/2018: Permit Update package prepared by EarthRes Group, Inc.

- 1. This package provided direct responses to the 05/03/2018 DEP Technical Deficiencies letter, including:
 - a. Complete PPC Plan for NPDES Renewal
 - b. Revised E&S Plan submitted on 05/22/2018 under separate cover to Joseph S. Blyler, Jr., P.E.
 - c. All maps in E&S Plan were updated and submitted under separate cover

- d. Bonding Map was updated to reflect revisions to E&S Plan
- e. Cross Sections included
- f. Bonding calculations updated and included

H. 06/08/2018: DEP Notice of Permit Correction

Letter providing the authorization the immediate implementation of the proposed Erosion & Sedimentation Pollution Control Plan (Module 12) included in previous submissions to DEP. Along with specific construction conditions, E&S Plan Certification and site visit requirements were conveyed.

I. 06/14/2018: Permit Update – E&S Plan Certification

- 1. Included the following:
 - a. E&S Photos and notes
 - b. Pond Certification for Basins 1 & 2
 - c. Supplemental As-Built Calculations
 - d. E&S Site Plan As-Built drawing

J. 06/20/2018: Permit Update – E&S Plan Certification additional information package

- 1. Included the following:
 - a. Additional Pond Certifications for Clarifier Pond and Sed. Traps 1, 2 and 3
 - b. Additional information on Pond Certification sheets
 - c. Narrative for field adjustments to Clarifying Pond outlet weir
 - d. Summary description of all E&S Controls
 - e. Description of the deviation from the outlet design for Sediment Trap 2

K. 06/28/2018: DEP E&S Pollution Control Plan Certification letter

DEP letter acknowledging all requirements for E&S Plan have been met and are approved. Attached information (E&S Plan) is to be considered an addendum to the original permit issued on 10/13/1976 and any subsequent revisions or corrections.

L. 07/19/2018: Permit Update package submitted to DEP by EarthRes Group, Inc.

1. This permit update package was prepared pursuant to the DEP 01/22/2018 & 05/03/2018 correspondence requesting updated permit documentation for Rock Hill Quarry, including:

- a. Module 1 – Application for Large Noncoal Surface Mining Permit (customary to include with all submissions of permit modules)
- b. Module 4 – Areas Where Mining is Prohibited or Limited
- c. Module 5 – Property Interests/Rights of Entry
- d. Module 6 – Environmental Resources Map
- e. Module 7 – Geology
- f. Module 8 – Hydrology
- g. Module 9 – Operations Map
- h. Module 13 – Impoundments/Treatment
- i. Module 18 – Land Use and Reclamation Map
- j. Module 19 – Land Use/Vegetation
- k. Module 20 – Post-mining Land Use and Reclamation
- l. Module 21 – Topsoil-Subsoil
- m. Module 23 – Revegetation
- n. Exhibit 6.1 – Site Location Map
- o. Exhibit 6.2 – Environmental Resources Map
- p. Exhibit 9 – Operations Map
- q. Cross-Sections
- r. Exhibit 18 – Land Use and Reclamation Map
- s. Module 14 – Streams/Wetlands was not updated since previous permit mapping was reviewed and it does not included wetlands and/or streams within the permit area. Other resources were reviewed and no indication of wetlands or streams within the permit area were identified.

M. 09/06/2018: DEP Technical Deficiencies letter

1. DEP identified Technical Deficiencies with the following:
 - a. Exhibit 6.2 – Environmental Resources Map
 - b. Module 8 – Hydrology
 - c. Groundwater Pumping Evaluation

N. 10/03/2018: DEP Technical Deficiencies letter

1. DEP identified Technical Deficiencies with respect to the Surface Mining Permit should a “hot-mix asphalt” plant be installed at the site. Modifications to the following modules are necessary to operate a “hot-mix asphalt” plant at the site:

- a. Module 9 – Operations Map
- b. Module 10 – Operational Information
- c. Module 12 – Erosion and Sedimentation Plan
- d. Module 13 – Impoundments-Treatment Facilities
- e. Module 17 – Air Pollution and Noise Control Plan

O. 10/25/2018: Permit Update – Response to Comments package submitted to DEP by EarthRes Group, Inc.

1. Based upon 09/06/2018 & 10/03/2018 Technical Deficiencies letters from DEP, the following items were submitted

- a. Revised Exhibit 6.2 – Environmental Resources Map
- b. Revised Module 8 – Hydrology
- c. Revised Groundwater Pumping Evaluation (GPE)
- d. Revised Exhibit 9 – Operations Map
- e. Revised Module 10 – Operational Information
- f. Revised Module 12 – Erosion and Sediment Control Plan
- g. Revised Module 13 – Impoundments and Treatment Facilities
- h. Revised Module 17 – Air Pollution and Noise Control

P. 11/19/2018: DEP Bond Request Letter

DEP letter indicating their technical review was complete and before the permit can be issued, Hanson was to provide a Reclamation Bond.

Q. 11/27/2018: Submission of Reclamation Bond No. 106896662, in amount of \$1,248,220, to DEP

R. 01/04/2019: DEP Letter acknowledging receipt of Bond No. 106896662 and release of Bond No. 64S105470805BCM (\$101,700).

Examples of the DEP's technical deficiency letters dated September 6, 2018 and October 3, 2018, along with a copy of Hanson's response to those letters dated October 25, 2018 are attached hereto.



September 6, 2018

Hanson Aggregates PA, LLC
7600 Imperial Way
Allentown, PA 18195

Re: Technical Deficiencies
Rock Hill Quarry Operation
Permit Application No. 7974SM1C10
Bonding Increment No. 24143-7974SM1-02
East Rock Hill Township, Bucks County

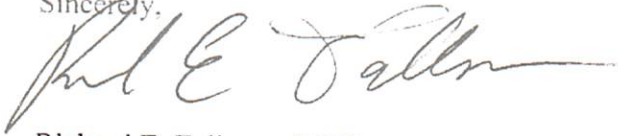
Ladies and Gentlemen:

The Department has reviewed your application and has determined that the following significant deficiencies exist:

1. Module 6.2 Map:
 - a. Please show background monitoring points SW-1 and SW-2 and provide permit and limit of mining acreages.
 - b. Please delineate the zone of influence as indicated in 8.6b. See Item 3. e. (77.410)
2. Module 8:
 - a. Please explain the high pH results of groundwater samples from MW-1 and MW-2 and the impact the intercepted groundwater discharged during mining operations may have on the receiving water. (77.405)
 - b. The monitoring plan (8.2b) proposes to conduct monthly monitoring of groundwater elevations in monitoring wells MW-1, 2, 3 & 4, however given the proximity of Perkasie Regional Authority water supply wells to the Rock Hill Quarry, monitoring should be conducted twice monthly when quarry pumping is initiated. Monitoring results should be compared to groundwater elevations predicted by the groundwater model at full expansion of the quarry as discussed in the GPE. (77.405)
3. GPE:
 - a. The StreamStats statistics "Harmonic Mean Streamflow" results are less than the "Base Flow x-Year Recurrence Interval" results for the drainage basins of SW-1, 2 & 3. Please explain this apparent discrepancy.
 - b. Attachment B provides a saturated thickness (b) of 155 feet for the calculation of hydraulic conductivity (K) at MW-3, however based on static water level

- measurements given in Module 8.1(A) saturated thickness ranged from 54 – 102 feet. Please explain the saturated thickness determination for MW-3 in Attachment B.
- c. Table 6: Please explain the hydraulic conductivity value of 0.1 ft/day for “Layer 2 & 3 Diabase North” given the K values for “Layer 2 Diabase South” (0.015 ft/d) and “Layer 3 Diabase South” (0.00001 ft/d).
 - d. Please correct formation names in the hydraulic conductivity section of the table under comments.
 - e. Please modify the groundwater model to show the predicted zone of influence for a total drawdown of 130 feet as it would occur across the entire pit floor at full expansion.

Sincerely,



Richard E. Tallman, E.I.T.
Civil Engineer (General)
Bureau of District Mining Operations

cc: Michael P. Kutney P.G., EGM
Michele Hamlin, Geologic Specialist
Gary Latsha, EGM
Amiee Bollinger, SMCI
EarthRes Group, Inc., Consultant
Tickler: 10/6/18
File
MS1-Hanson Rock Def (9-18)

MPK:RET:jaj



October 3, 2018

Hanson Aggregates PA, LLC
7600 Imperial Way
Allentown, PA 18195

Re: Technical Deficiencies
Surface Mining Permit Application Nos. 7974SM1C9, C10 & C11
NPDES Permit No. PA0594121
BI 24143-7974SM1-02
Rock Hill Quarry Operation
East Rock Hill Township, Bucks County

Ladies and Gentlemen:

The Department has reviewed your applications and has determined that the following significant deficiencies exist regarding the installation of the rock processing and dry process hot mix asphalt production facilities at the Rock Hill Quarry Operation:

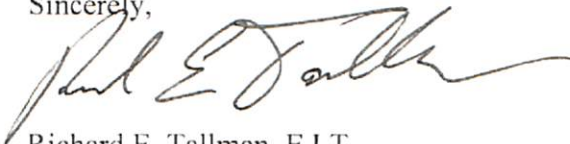
The Department understands that the hot mix asphalt plant will be dry process as per the permit issued September 7, 2018 by PA DEP Air Quality. A change to and installation of a "Wet Process" asphalt plant will require a major permit modification.

1. Please provide an updated Module 9: Operations Map
[§77.454]
 - a. With updates to but not limited to:
 - i. Module 9f) - changes to or locations of new man-made features
 - ii. Module 9n) – changes to or new water treatment facilities specifically the Oil/Water Separator
 - iii. Module 9o) – changes to or new surface water diversions from the rock processing or asphalt plant areas
 - iv. Module 9p) - changes to or locations of new erosion and sedimentation facilities
 - v. Module 9v) - changes to or locations of new processing facilities and stockpile areas
 1. Show RAP storage areas and Volumes
 - vi. Module 9w) – changes to or locations of new air pollution or sound pollution control facilities or
2. Please provide an updated Module 10: Operational Information
[§§77.452/77.456/77.563/77.564]
 - a. With updates to but not limited to:
 - i. Module 10.1 – changes to the Equipment and Operation Plan
 1. Include RAP in the operation plan
 - a. Volumes

- ii. Module 10.3 – changes to or new structures
 - iii. Module 10.15 – changes to the Bonding Calculations to reflect the rock processing or asphalt plant.
 - 1. Include RAP in bonding calculations
3. Please provide an updated Module 12: Erosion and Sedimentation Plan
[§§77.458/77.461/77.466/77.525/77.527/77.531/Chapter 102]
- a. With updates to but not limited to:
 - i. 12.2 Erosion and Sediment Control of runoff from the rock processing and asphalt plant areas
 - 1. Berms
 - 2. Sedimentation Traps
 - 3. RAP storage areas
4. Please provide an updated Module 13: Impoundments-Treatment facilities
[§§77.457/77.461/77.526/77.531/Chapter 105]
- a. With updates to but not limited to:
 - i. 13.1 - Treatment (Oil Water Separator)
5. Please provide an updated Module 17: Air Pollution and Noise Control Plan
[Chapters 121,123,127,129/NSMCRA 3323(a)(3)/§§ 77.455/77.575]
- a. With updates to but not limited to:
 - i. 17.1 – Processing Facilities
 - 1. Crushing
 - 2. Asphalt Plant
 - ii. 17.2 – Air Pollution Control Plan
 - 1. Permits
 - iii. 17.3 – Noise Control Plan
 - 1. “Township” plan

Should you have any questions regarding the identified deficiencies, please contact me to discuss your concerns or to schedule a meeting. If you believe the stated deficiencies are not significant, you have the option of declining and asking the Department to make a decision based on the information you have already made available. Please keep in mind that if you ignore this request or fail to respond to all of the deficiencies listed above by October 15, your application may be denied. Also, please note that due to the application deficiencies noted above, the Permit Decision Guarantee timeframes are no longer applicable.

Sincerely,



Richard E. Tallman, E.I.T.
Civil Engineer (General)
Bureau of District Mining Operations

cc: Michael P. Kutney, P.G., EGM
Gary Latsha, EGM
Amiee Bollinger, SMCI
Mike Fling, P.E., EarthRes Group, Inc., Consultant
Tickler: 11/3/18
File
MS1-Hanson Rock Hill (10-18)

RET:jaj

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phone 304-212-6866

October 25, 2018

Mr. Richard E. Tallman, E.I.T.
Civil Engineer
Bureau of District Mining Operations
PA Department of Environmental Protection
5 West Laurel Boulevard
Pottsville, PA 17901-2454

**SUBJECT: Permit Update – Response to Comments
Hanson Aggregates Pennsylvania LLC – Rock Hill Quarry
SMP No. 7974SM1
East Rockhill Township, Bucks County, PA
EarthRes Project No.: 061003.052**

Dear Mr. Tallman:

On behalf of Hanson Aggregates Pennsylvania, LLC (Hanson), Earthres Group, Inc. (EARTHRES) is hereby submitting the response to your comments dated September 6, 2018 and October 3, 2018. Please find enclosed the following items for your review:

- One (1) copy of Exhibit 6.2;
- One (1) copy of Module 8: Hydrology;
- One (1) copy of Groundwater Pumping Evaluation (GPE) replacement pages;
- One (1) copy of Exhibit 9;
- One (1) copy of Module 9: Operations Map;
- One (1) copy of Module 10: Operational Information;
- One (1) copy of Module 12: Erosion and Sediment Control Plan;
- One (1) copy of Module 13: Impoundments and Treatment Facilities;
- One (1) copy of Module 17: Air Pollution and Noise Control.

For ease of reference your comments are listed below and italicized with our responses included in **bold**.

Response to September 6, 2018 comments:

1. *Module 6.2 Map:*

a. Please show background monitoring points SW-1 and SW-2 and provide permit and limit of mining acreages.

Response: SW-1 and SW-2 are shown on the inset map included on Exhibit 6.2. The permit and limit of mining acreages have been added to the map.

b. Please delineate the zone of influence as indicated in 8.6b. See Item 3. e. (77.410)

Response: Exhibit 6.2 has been updated to depict the projected zone of influence.

2. *Module 8:*

a. Please explain the high pH results of groundwater samples from MW-1 and MW-2 and the impact the intercepted groundwater discharged during mining operations may have on the receiving water. (77.405)

Response: EARTHRES was onsite on October 4, 2018 to purge and resample MW-1 and MW-2. EARTHRES utilized a submersible pump set at a depth of approximately 100 feet and purged one (1) well volume from each well prior to sampling. Field monitoring during well purging indicated pH levels between 6.0 and 7.0, with final readings of 6.23 and 6.78 std. units for wells MW-1 and MW-2, respectively. Samples were collected for laboratory analysis and submitted under chain of custody to Test America Laboratories Inc. The laboratory results showed pH readings of 7.3 and 7.1 std. units for wells MW-1 and MW-2, respectively. The laboratory analytical results are included in Attachment 2A. The field and lab readings demonstrate that groundwater in MW-1 and MW-2 has a near neutral pH and therefore no adverse impacts will occur.

The previously observed high pH result is indicated to be related to grout used in well construction and completion.

b. The monitoring plan (8.2b) proposes to conduct monthly monitoring of groundwater elevations in monitoring wells MW-1, 2, 3 & 4, however given the proximity of Perkasio Regional Authority water supply wells to the Rock Hill Quarry, monitoring should be conducted twice monthly when quarry pumping is initiated. Monitoring results should be compared to groundwater elevations predicted by the groundwater model at full expansion of the quarry as discussed in the GPE. (77.405)

Response: Module 8.2b has been updated to include bi-monthly sampling after quarry pumping is initiated. Monitoring results will be compared to groundwater elevations predicted by the groundwater model. Please find the replacement Module 8 (attached). The monitoring plan has also been updated in the GPE. Please find the replacement page 3-2 for the GPE (Attached).

Additional background monitoring results obtained since the July Permit Update submittal are included in Attachment 2B.

3. *GPE:*

a. The StreamStats statistics "Harmonic Mean Streamflow" results are less than the "Base Flow x-Year Recurrence Interval" results for the drainage basins of SW-1, 2 & 3. Please explain this apparent discrepancy.

Response: The fact that the harmonic mean streamflow is less than baseflow statistics is not a discrepancy. StreamStats statistical data is generated and provided by the USGS. The methodology employed by the USGS in generating this data is standardized. Harmonic mean streamflow is a statistical mean that gives greater weight towards zero and low flow events than to high flow events. Harmonic mean stream flow is usually a value that is less than both mean annual streamflow and baseflow values.

b. Attachment B provides a saturated thickness (b) of 155 feet for the calculation of hydraulic conductivity (K) at MW-3, however based on static water level measurements given in Module 8. 1(A) saturated thickness ranged from 54 - 102 feet. Please explain the saturated thickness determination for MW-3 in Attachment B.

Response: At the time of slug testing, the water level in MW-3 had not yet equilibrated with the aquifer; therefore an estimated depth to water of 20 feet was utilized in the calculation of saturated aquifer thickness (based on the approximate depth to water in MW-2). The water level in MW-3 has continued to rise during background monitoring. On 9/26/2018, the level was at 41.52 feet (up from the maximum depth of 123.25 feet of 5/30/2018) and is expected to continue to rise before reaching its natural equilibrium level. Given the extremely low hydraulic conductivity near the well, use of an estimate for saturated thickness will have negligible impact to the model. For example, if the saturated thickness is adjusted from 155 feet to 54 feet the hydraulic conductivity increases from 2.39×10^{-5} ft/day to 6.74×10^{-5} ft/day (see Attachment 3B). Both estimates are within the same order of magnitude and indicative of a very low permeability.

c. Table 6: Please explain the hydraulic conductivity value of 0.1 ft/day for "Layer 2 & 3 Diabase North" given the K values for "Layer 2 Diabase South" (0.015 ft/d) and "Layer 3 Diabase South" (0.00001 ft/d).

Response: The diabase area to the north (diabase north) has significantly less topographic relief than the ridge (diabase south) where the quarry is located (see Attachment 3C). This suggests the diabase north area is more weathered than the ridge and likely has different hydrogeologic properties.

In the model, the north area was parameterized separately from the ridge. During calibration, different K values were obtained as expected based on the topography/geomorphology. The reduction of K with depth in Layer 3 of the diabase north zone was not applied. This adjustment could have been completed for consistency; however, the change has no effect on the quarry pumping results as the quarry does not directly encounter this unit.

d. Please correct formation names in the hydraulic conductivity section of the table under comments.

Response: Table 6 of the GPE has been revised to correct the formation names in the hydraulic conductivity section of the table. See replacement pages 2-4 and 2-5 (attached).

e. Please modify the groundwater model to show the predicted zone of influence for a total drawdown of 130 feet as it would occur across the entire pit floor at full expansion.

Response: Figure 3 has been revised to depict the maximum drawdown under full quarry expansion conditions. The revised Figure 3 is attached. The model does not simulate uniform drawdown across the entire pit floor because drawdown is calculated from the pre-quarry water table which has a natural slope under pre-pumping conditions.

Response to October 3, 2018 comments:

1. *Please provide an updated Module 9: Operations Map [§77.454]*
 - a. *With updates to but not limited to:*
 - i. *Module 9f) – Changes to or locations of new man-made features.*
 - ii. *Module 9n) – Changes to or new water treatment facilities specifically the Oil/Water Separator*
 - iii. *Module 9o) – Changes to or new surface water diversions from the rock processing or asphalt plant areas*
 - iv. *Module 9p) – Changes to or locations of new erosion and sedimentation facilities*
 - v. *Module 9v) – Changes to or locations of new processing facilities and stockpile areas*
 1. *Show RAP storage areas and Volumes*
 - vi. *Module 9w) – Changes to or locations of new air pollution or sound pollution control facilities*

Response: Exhibit 9 has been updated to show proposed locations of the Processing Plant, Hot Mix Asphalt Plant and associated stockpile areas, E&S control devices and treatment facilities.

2. Please provide an updated Module 10: Operational Information [§77.452/77.456/77.563/77.564]:
- a. With updates to but not limited to:
 - i. Module 10.1 – Changes to the Equipment and Operation Plan
 - 1. Include Rap in the Operation Plan
 - a. Volumes
 - ii. Module 10.3 – Changes to or new structures
 - iii. Module 10.15 – Changes to the Bonding Calculations to reflect the rock processing or asphalt plant
 - 1. Include RAP in bonding calculations

Response: Module 10.1 has been updated to include the operational information regarding the proposed Processing Plant, Hot Mix Asphalt Plant and RAP stockpile area.

Bonding Calculations (Section 10.15) will be provided upon completion of the as-built survey following construction of the proposed facilities.

3. Please provide an updated Module 12: Erosion and Sediment Control Plan [§77.458/77.461/77.466/77.525/77.527/77.531/Chapter 102]
- a. With updates to but not limited to:
 - i. 12.2 Erosion and Sediment Control of runoff from the rock processing and asphalt plant areas
 - 1. Berms
 - 2. Sedimentation Traps
 - 3. RAP storage areas

Response: Module 12 has been updated to include a Schedule of Implementation for the Hot Mix Asphalt Plant and RAP Stockpile areas.

In addition, a revised copy of the drainage area map has been provided to include the updated topographical information for the proposed Processing Plant and Asphalt Plant Area and to include revisions to the stormwater handling plan for these areas. The drainage areas were reviewed to confirm if changes were needed to downstream treatment facilities. Following review, it was determined that the existing controls provide sufficient capacity to manage the change. Updated volume calculations for Sediment Basin 2 are included as an attachment to Module 12.

4. Please provide an updated Module 13: Impoundments and Treatment Facilities [§77.457/77.461/77.526/77.531/Chapter 105]
- a. With updates to but not limited to:
 - i. 13.1 – Treatment (Oil/Water Separator)

Response: Module 13 has been revised to include the installation of an Oil Containment Boom to isolate runoff from the proposed Asphalt Plant area.

5. Please provide an updated Module 17: Air Pollution and Noise Control Plan [Chapters 121, 123, 127, 129/NSMCRA 3323(a)(3)§77.455/77.575]
- a. With updates to but not limited to:
 - i. 17.1 – Processing Facilities
 - 1. Crushing
 - 2. Asphalt Plant
 - ii. 17.2 – Air Pollution Control Plan
 - 1. Permits
 - iii. 17.3 – Noise Control Plan
 - 1. “Township” plan

Response: Module 17 has been updated to include the above requested information as currently available.

If you have any questions or require additional information, please contact us at (215) 766-1211.

Sincerely,
Earthres Group, Inc.



Michael D. Fling, P.E.
Project Manager



Louis F. Vittorio, Jr., P.G.
Vice President

Enclosures: As stated

Cc: Mark Kendrick, Hanson (Letter only)
Andrew Gutshall, Hanson
Bill Bowling, R.E. Pierson