

Sherman's Valley Aggregates
Review Memo

Reviewer: Scot May	County: Perry
Operator Name: Centre Lime and Stone Company, Inc.	Township: Centre
Permit Number: 50210301	Quad. Name: Ickesburg/Newport
Mine Name: Sherman's Valley Aggregates	Date: 3-24-2022

Mining Activity: Issued Denied Withdrawn Negative Pre-App.

Type of Activity: Surface
 Industrial Mineral

Total Permit Acreage: 29.3
Duration of Operation: market dependent

Mineral	Acreage
Limestone	11.4

Receiving Streams	Class
Unnamed Tributary to Little Juniata	CWF, MF

Existing Land Use	Proposed Land Use
Industrial/Commercial	Unnamed natural habitat

I. Introduction and Timeline

A pre-application for Large Non-Coal Surface Mining Permit was received March 2, 2021 from Glenn O. Hawbaker, Inc.

On April 12, 2021, the Department held a pre-application field meeting was held on site with applicant and their consultants, Pennsylvania Game Commission, Pennsylvania Fish and Boat Commission, and the property owner. The following corrections were asked for to be included the official application:

General Comments:

There were no comments from PFBC or PGC on this application. Our staff engineer also did not have any comments outside of the usual E&S requirements.

MODULE 4

1. Section 4.1: Waiver from occupied dwelling with 300'
2. Section 4.3: Cultural Resources approval

The consultant acknowledged and will provide with the permit submittal.

MODULE 5

1. Section 5.1.b: Right of entry
2. Section 5.1.c: Supplemental "C" consent of landowner

The consultant acknowledged and will provide with the permit submittal.

MODULE 8

1. Module 8.2 Background Sampling and Monitoring (a)(8): Provide data for static water levels and depths of wells for MP-2 and MP-6 to establish water table levels for these two points.

The consultant will provide static water levels and depths of wells.

2. Module 8.2 Background Sampling and Monitoring (b): There was a discussion of moving MP-5 closer to the permit area. Based on topography and surface water flow conditions, MP-5 will stay at the current location.

The consultant will continue using MP-5. Due to the location and proximity to agricultural use, when submitting sample data, rain events that would affect sample test parameters will be noted.

MODULE 10

1. Module 10.15 Bonding calculations.

The consultant acknowledged and provide with the permit submittal.

MODULE 19

1. Module 19.1 Primary Agricultural Land (c)- Request a Prime Farmland Negative Declaration to update the extent of prime farmland by removing the classification of the portion of the prime farmland and grant a negative determination of the indicated area.

Using the following criteria:

1. Permeability test data that indicates less than 0.06 inches per hour in the upper 20 inches. 30 CFR §716.7(a)(3)(b)(8)
2. A written notification based on scientific findings and soil surveys that land within the proposed mining area does not meet the applicability requirements in 30 CFR §716.7 (a) and is submitted to our department by a qualified person other than the applicant.

After reviewing the area designated as Prime Farmland, the Department finds based on the topography and outcrops of limestone present, a permeability test will not be required.

On June 28, 2021 DEP received an application from Centre Lime & Stone, Company, Inc.

On July 12, notice was sent to Skelly & Loy (consultants for Centre Lime) that the application was accepted. There was an issue with the use of a GP-104 or a NPDES permit because the site sits between a HQ stream and one that is not. Based on a discussion with the Bureau of Mining Programs and Bureau of Clean Water regarding the use of GP-104 in HQ watersheds. The conclusion was that it would be acceptable to allow the GP-104 coverage provided that 1. there would be no discharge to the HQ waters (stream) and 2. there would be no potential to cause or contribute to a violation of an applicable water quality standard established under Chapter 93 (relating to water quality standards) or cause significant adverse environmental impact.

At the request of DEP a revision to Mod 5: Property Interests 5.1 was received on August 30. The purpose of the revision was to remove T. Adams and D. Weller as affected property owners from 5.1.a since these properties were not located within the proposed permit boundary.

On September 23, a public meeting was scheduled for October 27th at the Perry County Courthouse.

On October 27, a public meeting was held at the Perry County Courthouse. Approximately, 75 residents attended. Representatives from the Cambria District Mining Office, DEP Legal counsel, Centre Lime & Stone Company, Inc. their consultants were also in attendance

On December 1, a field meeting was held on Mr. Zerance's property to address sampling procedures that were questioned during the public meeting. A method was agreed upon on to accurately measure the flow at the MP3 spring. Two additional points were added, one upstream of the outfall of the pond MP3 supplies, and one downstream. Because the pipe that feeds the

pond juts out too far to safely measure the flow rate, measuring the flow of the outfall from the spring was picked because of its constant flow.

On December 20, an engineering deficiency letter was sent to the applicant.

On January 13, 2022 the applicant provided engineering revisions requested by the Department.

On January 24, 2022 Centre Lime and Stone Company, Inc. submitted an application for a highway occupancy permit (HOP) to PennDOT for the proposed haul road entrance on to Mannsville Road.

On February 23, the application was revised to correct typographical errors and inconsistencies. Additional pre-mining monitoring data for MP-3 was also provided. Additional samples will be provided when collected.

On March 23, the Cambria District Mining Office finalized the comment and response document for the public meeting held on October 27.

On March 23, Skelly & Loy provided an update on the HOP. A meeting is scheduled for April 13 with PennDOT to finalize the permit. The permit is conditioned that no activity can occur onsite until the HOP is approved.

II. Major Issues Raised at the Public Meeting

These are brief summations of the most asked questions from the meeting. More in-depth responses can be found in the comment and response document.

Water

Well contamination, water supply loss, and negative effects to surface and ground water due to effluent resulting from mining operations.

Mining operations will remain above the regional water table. No pumping of groundwater is proposed nor planned to be intercepted. The estimated groundwater elevation in the proposed pit area ranges from 700 feet above mean sea level in the east to about 825 feet above mean sea level in west. Operations will remain 5-10 feet above these estimated groundwater elevations. While no impacts to private water supplies are anticipated, should an impact occur, the permittee is required by law to restore or replace to the water supply to pre-mining quality and quantity.

Any water that will be collected or diverted is precipitation (stormwater); no water is generated from the mining activities. All stormwater runoff will be directed into the pit and utilized onsite or pumped to outfall 001 for discharge to unnamed tributary to Little Juniata Creek. Along Mannsville Road, the operator will place 18-inch diameter compost filter sock as indicated on the Exhibit 9 - Operations Map. The compost filter sock will be inspected by the operator weekly

and after rainfall events, as specified in the notes on Exhibit 9 – Operations Maps. Damaged compost filter sock will be replaced within 24 hours of inspection. There will also be a compost filter sock placed around the western side of the pit once mining takes place in that area.

Module 8.2 of the permit application contains a monitoring program for the assessment of potential impacts from this permit. As part of the monitoring program a downstream monitoring point has been established on the unnamed tributary to Little Juniata Creek (MP-5) and unnamed tributary to Lutman Run (MP-4). Six pre-mining monthly samples were collected from these locations which included flow measurements, field and laboratory pH, total suspended solids and temperature. These monitoring points will be monitored quarterly upon permit issuance until final bond release on this permit. Pre-mining data will be utilized to assess potential impacts to the receiving streams from this mining operation. In addition, point source discharges from this operation must be permitted.

Blasting

Damages to structures, roads, or livestock due to blasting from mining operations.

PA regulations require that blasting be monitored for ground vibration and air blast. PA regulations set regulatory limits for air blast and ground vibration and prohibit damage. PA Code 25 §211.151(c) states that all blasts shall be conducted in a manner that meets the maximum allowable peak particle velocity as indicated by the U.S.B.M. Z-Curve at the closest building or other structure designated by the Department. PA Code 25 §211.151(d) states that blasts shall be conducted to control air blast so that it does not exceed the maximum allowable air blast of 133 dB. The Department's stringent limits for ground vibration and air blast are set so that levels below the limits will not cause damage to buildings or other structures. It is required under the regulations that blasting be monitored for ground vibration and air blast. The seismograph reports of the site blast records indicate the air blast levels generated by the blasting. If the air blast levels from the blasting exceed 133 dB at a building it is a violation of the regulations and an enforcement action will be taken. Although you may feel or hear your house respond to blasting vibrations your house will not be damaged by vibrations below the Department's regulatory limits.

Noise and Dust Pollution

Issues with the noise and dust associated with mining operations.

Module 17 addresses noise and dust. The proposed mine site is mostly surrounded by farmland and forestland (to the west), which limits noise to the public in all directions. Best management practices will always be utilized by equipment operators to minimize the creation of noise. As the quarry develops, the pit highwalls will help keep the noise limited to the confines of the pit. Intermittent blasting will be limited to daylight hours. Best management practices and blasting plans will be employed to minimize air blast and associated noise generated by blasting. Such measures may include using enough stem length and blasting when wind conditions are

favorable. An onsite water truck will be utilized to suppress any dust generated from the mining operation. Calcium chloride will be used if necessary.

The Air Pollution Control Plan is outlined in Module 17.2 of the permit application. In addition, an air quality general permit is required for all crushing and screening operations, which outlines mitigative measures that must be implemented. Under the contracted crushing operator's Air Quality Permit (BAQ-GPA/GP-3) **Sec 18. Air Pollution Control Device Specifications, a. Water Spray Dust Suppression Systems**, water spray dust suppression systems on portable nonmetallic mineral processing plants shall be operated on all occasions that the respective plant is operated. Operation without simultaneous operation of the water spray dust suppression system can take place only in those unusual instances where processed materials contain sufficient moisture so as not to create air contaminant emissions in excess of the limitations and standards of this General Permit. If, however, the water spray dust suppression system is incapable of operation due to weather conditions or any other reason, the permittee may not operate the plant. A pressure gauge will be installed to indicate a normal operation of the dust suppression system.

25 PA Code §211.151(d) states that blasts shall be designed and conducted to control air blast so that it does not exceed 133 dBL. Although no studies have been published on blasting effects on milk production, one was completed on cows exposed to recorded jet noise (105 dBL) just before milking and showed no behavioral or productivity responses during a 21-day treatment period. Results of this and previous studies suggest that any response of dairy cows to jet noise around milking would be subtle. Although no other physiological effects of noise treatments were measured, any that might have resulted did not reduce productivity. Cows on dairies are constantly exposed to a wide array of noises from farm equipment, farm machinery, and work activities that may have habituated them to noises above the presumed threshold for response. Thus, no aversive behaviors or decreased productivity occurred in response to recorded jet aircraft noise of low altitude aircraft overflights. (Head, H. & Jr, R. & Campos, M. & Bachman, K. & Wilcox, C. & Cline, L. & Hayen, M.)(1993). Milk Yield, Milk Composition, and Behavior of Holstein Cows in Response to Jet Aircraft Noise Before Milking. *Journal of Dairy Science - J DAIRY SCI.* 76. 1558-1567). Using the 133 dBL limit and the Sound Propagation Inverse Square Law that states sound levels decrease by 6 dBL with each doubling of distance, at 1.25 feet, the blast is limited to 133 dBL. At 50 feet the blast is reduced to 102 dBL. At 1000 feet, it is reduced to 75 dBL. The aforementioned study found at 105 dBL, no effects to milk production occurred. At 1000 feet away from the blast, the 75 dBL is the same sound level range as a sink garbage disposal at a distance of 3 feet. (Kimley-Horn and Associates, Inc. Noise and Vibration Impact Assessment Technical Report. December 7, 2011). The study subjected the cows to a 21-day study several times a day. Blasting here would be one quick blast once every few years.

Mining Operations

Questions concerning mining operation and associated permits that go along with mining operations.

In order for a person and/or business to apply for a surface mining permit, they must first obtain a mining license issued by the Commonwealth of Pennsylvania and carry the required liability insurance. License and insurance requirements can be found at 25 PA Code §77.51. Additional insurance requirements may be required depending on the nature of the permit being applied for. The mining license must be renewed annually and during the license renewal process proof of insurance is required. In order to obtain a permit, a person and/or business must submit the appropriate application to the Department of Environmental Protection for review. The eLibrary allows for viewing and downloading of most Department forms and permit applications. Look under Forms, Bureau of Mining and Reclamation tab. Permit application packages can be found under Permit and Authorization Packages. If you can't find the form/application you are looking for, please contact the District Mining Office serving your county. If the application complies with all the all the applicable statues, regulations, license, and compliance requirements, and the required bond is posted, a permit is issued. Requirements for approval or denial of a noncoal surface mining permit can be found at 25 Pa Code §77.126.

The requirements for general permits are outlined in 25 Pa Code §92a.54. The permittee does not propose a point source discharge to Lutman Run. The Bureau of Mining Programs consulted with the Bureau of Clean Water regarding the applicability of a GP-104 in special protection [High Quality (HQ) or Exceptional Value (EV)] watersheds. The conclusion was that it is acceptable to allow use of GP-104 coverage provided that 1. there would be no point source discharge to special protection waters and 2. there would be no potential to cause or contribute to a violation of an applicable water quality standard established under Chapter 93 (relating to water quality standards) or cause significant adverse environmental impact. The Department evaluates the applicability of coverage under a GP-104 on a case be case basis. With respect to Centre Lime & Stone Company, Inc's. GP-104 application, the Department determined that there was reasonable assurance that there would be no point source discharge to Lutman Run and that there was no reasonable potential to cause or contribute to a water quality violation. Therefore, use of the GP-104 was approved.

The application has been reviewed by a Commonwealth-licensed professional engineer at the Cambria District Mining Office. The maximum drainage area for a sediment trap is 5.0 acres. The proposed drainage area to the Sediment Trap on the application is 5.0 acres. The sediment trap meets E&S manual requirements for sediment storage and dewatering storage volumes. The operator will place 18-inch diameter compost filter sock as indicated on the Exhibit 9 - Operations Map. The compost filter sock will be inspected by the operator weekly and after rainfall events, as specified in the notes on Exhibit 9 – Operations Maps. Damaged compost filter sock will be replaced within 24 hours of inspection. Details for placement of compost filter sock are also included within the application. DMO inspection staff will verify placement and will inspect as part of their regular duties. E&S BMP will be installed prior to commencement of mining permit activities.

Public Outreach

There were questions concerning the public notification of this permit, the public meeting and why this area was chosen.

The location of a surface mine is based on the availability and location of the mineral to be mined, economic viability, and market conditions. Rural and agricultural areas are not targeted specifically for mining due to geography. The Department has an in-depth review process for mining permit applications. These are reviewed by licensed engineers, geologists, mining inspectors, federal EPA, various state organizations, and legal departments. The Department of Environmental Protection's mission is to protect Pennsylvania's air, land, and water from pollution and to provide for the health and safety of its citizens through a cleaner environment. We will work as partners with individuals, organizations, governments, and businesses to prevent pollution and restore our natural resources.

25 Pa. Code §77.121 requires that applicants and permit holders submit a notification to a newspaper of general circulation in the locality of the proposed or existing mining activities. The Department publishes notice of receipt of an application in the Pennsylvania Bulletin and provides written notice to the township and county where the permit is located. The Department cannot require the permittee provide notice to adjacent landowners of a proposed application. All public notice and participation requirements as required by the applicable statutes and regulations were followed for the submittal and review of this permit application. The following notifications were made by the operator and Cambria District Mining office: Communications between other agencies, certified letters sent to Perry County Planning Commission (Received/Signed June 11, 2021); Jason Finnerty, Centre Twp (Received/signed June 15, 2021 - Diane McPherson); Tri County Regional Plan (Received June 11, 2021 - signature says Covid). Notification letters sent to Perry County Conservation District, Bureau of Abandoned Mine Reclamation, Department of Transportation, Bureau of Historic Preservation, SCRO Harrisburg Water Supply Management, PA Bulletin 51 Pa. B. 3981 - Applications, Actions and Special Notices, Issue: July 24, 2021, PA Bulletin 51 Pa. B. 6421 - Applications, Actions and Special Notices Issue October 9, 2021, *The New-Sun*, *Duncannon Record*, and *Perry County Times* published a public notice July, 21,22, 28, 29 Aug 4, 5,11,12 2021.

The notification letters sent to Centre Township Supervisors, Perry County Commissioners, and the notification posted in the Perry County Times (published Oct 6, 7, 2021) state the following: *the Department has scheduled the public meeting for the above referenced proposed mining permit, to be held at the Perry County Courthouse Room #1, on Wednesday, October 27th, 2021. Department representatives will arrive around 9:30 AM, to start setting up for the meeting. An open house will be conducted from 10:00 AM to 11 :00 AM, to discuss the permit application with interested parties. Beginning at 11:00 AM, formal comments regarding the application will be accepted.* Due to the number of participants and volume of questions asked, the informal portion of the meeting was extended to allow representatives from the Department and the permittee answer address all questions regarding the application before formal testimony was taken.

Prime Farmland Designation

Because the NRCS identifies some of the acres on this permit application as Prime Farmland, questions concerning what that means and will mining operations affect this area.

The operator can request a negative determination for designated prime farmland soil(s) If the determination can be made by the Department based on factors that do not require review by the NRCS (for example, land was not historically used as cropland or has other characteristics that render the soil as obviously unsuitable for cropland), the applicant must provide the information to justify a negative determination. The negative determination is done as part of the pre-application prime farmland investigation. The purpose of the submission is to update the extent of prime farmland by removing a portion of the prime farmland and grant a negative determination of the indicated area. The Department upon a visual inspection, the outcrops of limestone, the lack of soil, and reports that the previous owner removed the soil to build a runway for his airplane led us to determine that a Negative Farmland Determination was acceptable since prime farmland soils no longer exist within the proposed mining area. The support area along Mannsville Road consists of a residential rental property and disturbed area where fill has been placed over top of the mapped prime farmland soils. The underlying prime farmland soils will not be disturbed in this area. The processing facility and stockpiles we be placed on top of the fill material.

Pennsylvania Natural Diversity Inventory (PNDI)

A PNDI survey was completed by the applicant on January 7, 2021. Based on the project location no known impacts to threatened and endangered species and/or special concern species and resources were identified.

Cultural and Historic Resources

A Pennsylvania Historic Preservation Office (PA SHPO) Environmental Review was submitted to the PA SHPO on June 10, 2021 for the proposed permit area. PA SHPO responded on June 22, 2021 that there were no potential conflicts above ground historic properties (resources listed or eligible for listing on the National Register) present in the project area

III. CONCLUSIONS

Having considered the application, the updates to the application and the relevant statutes, regulations, policies and Pennsylvania Constitutional obligations, I recommend the issuance of the Surface Mining Permit and GP-104.