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October 18, 2019

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
SINGLE ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Quarry Minerals Management Area
PROJECT MUNICIPALITY : Adams
PROJECT WATERSHED : Hoosic River
EEA NUMBER : 16040
PROJECT PROPONENT : Specialty Minerals, Inc.
DATE NOTICED IN MONITOR : September 11, 2019

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62I) and Section 11.08 of the MEPA regulations (301 CMR 11.00), I have reviewed the Single Environmental Impact Report (Single EIR) and hereby determine that it **adequately and properly complies** with MEPA and its implementing regulations.

Project Description

As described in the Single EIR, the project consists of the construction of a solid waste disposal area, known as the Quarry Minerals Management Area (QMMA), at a limestone quarrying and processing facility (facility). The limestone is processed to produce calcium carbonate and several co-products, including crusher fines, kiln feed solids (KFS) dust, fluosolids (FS) dust and pond solids. The co-products may be recycled or reused to produce other products, or disposed of on-site in existing landfills. Pond solids and FS dust are categorized as solid waste and their disposal is regulated by the

Massachusetts Department of Environmental Protection (MassDEP). The QMMA will not accept solid waste generated off-site.

The QMMA will be constructed by the phased filling of a portion of an existing quarry. The first phase includes the construction of a 115-foot (ft) thick subbase at the bottom of the quarry. The subbase will consist of 3.2 million cubic yards (cy) of clean fill (unprocessed rock strippings from quarrying operations) that are either currently stockpiled on the site or will be generated by future quarrying operations. The top of the subbase will be established at elevation 765 ft NAVD 88, which is five feet above the peak groundwater elevation of 760 ft NAVD 88. A 12-inch diameter drain pipe will be installed at the peak groundwater elevation. It will minimize intrusion of groundwater into solid waste placed on top of the subbase by conveying water to existing settling ponds located on the east side of Route 8 (Columbia Road). Construction of the subbase will start at the southern end of the QMMA and proceed to the northern end, where a final 2:1 (horizontal:vertical) slope will be constructed to meet the bottom of the quarry at elevation 615 ft NAVD 88.

As sections of the subbase are completed, landfill cells will be constructed on the subbase with 20-ft high perimeter berms. The berms will consist of clean material placed at a 1:1.5 slope. Diversion berms and swales will be constructed for each cell to minimize stormwater contact with solid waste. The final design of the landfill will include 2:1 slopes along the north and east sides. The top of the landfill will be at elevation 1,235 ft NAVD 88 to match the surrounding topography. The landfill will be covered with loam and seeded.

The facility generates approximately 318 tons per day of solid wastes, including 71 tpd of FS dust and 247 tpd of pond solids. In addition to approximately 310 tpd of FS dust and pond solids, the QMMA will receive unregulated waste generated at the site, including KFS dust, crusher fines, mill waste material previously disposed of within the quarry and unprocessed rock. Two landfills currently operating at the facility, the Powerline Landfill and the Notch Road Landfill, are expected to reach capacity in two to three years. The QMMA will provide the Proponent with approximately 16,000,000 cy of new disposal capacity, which should accommodate the Proponent's solid waste disposal requirements for over 50 years.

Project Site

The Proponent's facility covers approximately 970 acres in north-central Adams. The site has been in use for limestone mining since the mid-1800's. It is bisected by Route 8, with quarrying and processing operations west of the road and settling ponds to the east. The facility is bordered to the west by undeveloped land, including the Department of Conservation and Recreation's Mount Greylock State Reservation, to the east by the Hoosac River, and to the north and south by residential and commercial uses along Route 8. The Proponent's facility is located in an area zoned for industrial use.

The quarry is located on the west side of the site. Three existing landfills, including the Dollar Farm Landfill, the Powerline Landfill and the Notch Road Landfill, are located to the west of the quarry. The Dollar Farm Landfill reached its capacity in the 1990s and has been closed. The QMMA will occupy a 72-acre portion of the inactive southern end of the quarry. The quarry is generally 350 feet (ft) deep at its southern end; the bottom of the quarry is at elevation 550 feet NAVD 88 and the access road

at the top is at elevation 895 ft NAVD 88. Peak elevations north and west of the quarry associated with the existing landfills and landforms range from 1,000 ft to 1,150 ft NAVD 88.

Environmental Impacts and Mitigation

Potential environmental impacts associated with the project include the disposal of 310 tpd of solid waste and associated noise and emissions of air pollutants, including greenhouse gas (GHG) and dust. Solid wastes generated at the site have the potential to impact groundwater and surface water quality.

Measures to avoid, minimize and mitigate environmental impacts include minimizing contact between solid waste and stormwater and groundwater by elevating the landfill above groundwater levels and installing a drainage system to convey water away from the landfill. All wastes will be generated on-site and all truck traffic, noise and dust will be confined to the existing facility. The QMMA will be located at least 1,000 ft away from residential buildings. The project will not increase the volume of stormwater and groundwater conveyed to the settling ponds and may decrease the volume of groundwater entering the drainage system. On-site disposal of solid waste will minimize GHG emissions compared to transport of the material to an off-site landfill.

Jurisdiction and Permitting

The project is subject to the preparation of a Mandatory EIR pursuant to the 301 CMR 11.03(9)(a) because it requires Agency Actions and will provide new capacity of 150 or more tpd for disposal of solid waste. The project requires a Site Assignment, Authorization to Construct a Large Landfill, Authorization to Operate (ATO) and Corrective Action Design (CAD) permits from MassDEP.¹ The project is subject to the MEPA GHG Emissions Policy and Protocol (GHG Policy) and the EEA Environmental Justice (EJ) Policy.

The project requires a Site Assignment approval from the Adams Board of Health. The facility is subject to a National Pollutant Discharge Elimination System (NPDES) Permit from the United States Environmental Protection Agency (EPA) that is currently being renewed.

Because the Proponent is not seeking Financial Assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required Agency Actions and that may cause Damage to the Environment as defined in the MEPA regulations. In this case, MEPA jurisdiction extends to land alteration, solid waste and GHG emissions.

Review of the Single EIR

The Single EIR was generally responsive to the limited Scope included in the Certificate on the EENF. It provided additional detail on the stormwater management system, reviewed landfill design features to minimize water quality impacts, and described a long-term environmental monitoring

¹ According to MassDEP, ATO and CAD permits may be required for the construction and closure of individual landfill cells.

program to track the effectiveness of mitigation measures during landfill operations and post-closure period. The Single EIR included responses to comments received on the EENF and draft Section 61 Findings.

Water Quality

Groundwater and stormwater runoff are collected from low points in the quarry and pumped to settling ponds on the east side of Route 9. Water from the settling ponds is discharged through culverts and drainage channels to the Hoosic River. The facility's NPDES permit requires monitoring of Total Suspended Solids (TSS), temperature and pH in water discharged from the settling ponds into the Hoosic River.

Stormwater management measures associated with the landfill include diversion berms and swales, which will be installed as landfill cells are created. According to the Single EIR, the landfill will not change the quality or volume of stormwater directed to the settling ponds. The project will not increase the volume of runoff and stormwater will be diverted away from the active landfill face so that it does not come into contact with processed wastes. As noted above, the landfill drainage system will include a 12-inch diameter drain pipe that will be installed at the peak groundwater elevation to minimize intrusion of groundwater into solid waste. The project will not direct additional groundwater to the settling ponds because the existing drainage system pumps groundwater collected in the quarry from lower elevations than under proposed conditions. According to the Single EIR, the design of the drainage system will minimize contact between solid waste and water directed to the settling ponds. It will not cause changes in water quality, including phosphorous levels and pH, of the discharge into the Hoosic River. The diameter of the drain pipe was selected to provide adequate capacity to convey an increase in runoff volume based on a projected 14 percent increase in annual precipitation by the end of the century. According to climate change predictions prepared by Northeast Climate Science Center at the University of Massachusetts at Amherst (available through the Climate Change Clearinghouse for the Commonwealth at www.resilientMA.org), precipitation during the winter season may increase by much more than the increase in average annual precipitation. During the permitting process, MassDEP should evaluate whether the drain pipe has been adequately sized for future conditions.

Mitigation and Draft Section 61 Findings

The Single EIR provided draft Section 61 Findings for use by State Agencies. The Section 61 Findings should be revised in response to this Certificate and provided to State Agencies to assist in the permitting process and issuance of final Section 61 Findings. The Proponent will provide a GHG self-certification to the MEPA Office that is signed by an appropriate professional (e.g., engineer, architect, transportation planner, general contractor) and indicates that all of the required mitigation measures, or their equivalent to achieve emissions reductions identified in the Single EIR, have been completed.

Landfill Construction and Operations

- Install a 12-inch diameter drain pipe a minimum of 4-feet below solid waste in the landfill to maintain a separation between processed wastes and stormwater and groundwater conveyed to the settling ponds under existing and projected precipitation levels;

- Implement a Fugitive Dust Abatement Plan, including application of daily cover soil material on the landfill, spraying water on the active landfill face, using trucks retrofitted with tailgates that minimize dust generation and applying chloride to on-site access roads when necessary;
- Maintain a minimum 1,000-ft buffer between solid waste disposed of in the landfill and residential properties and restrict hours of operation to 6:00 AM to 6:00 PM to minimize noise and air quality impacts to residences;
- Minimize sedimentation and erosion by compacting daily cover soils, placing intermediate soil capping materials over the landfill and inspecting the landfill surface for signs of erosion;
- Minimize impacts associated with truck traffic, including air emissions, noise and dust, by disposing of the waste material at the on-site landfill;
- Minimize impacts to groundwater quality by placing waste material a minimum of four feet above the groundwater elevation and installing a gravity pipe to convey groundwater below that elevation;
- Vegetate completed portions of the landfill with native plants to provide habitat and carbon sequestration;
- Implement a long-term monitoring groundwater and surface water program, including sampling for pH, dissolved oxygen, dissolved metals, chlorides, sulfate and alkalinity, and provide annual reports to MassDEP; and,
- Avoid the release of 2,518 tpy of GHG emissions by disposing solid waste in an on-site landfill rather than trucking material off-site.

Conclusion

Based on a review of the Single EIR, comments letters, and consultation with State Agencies, I find that the Single EIR adequately and properly complies with MEPA and its implementing regulations. Outstanding issues can be addressed during State and local permitting and review. No further MEPA review is required. The project may proceed to permitting. The Proponent and State Agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.

October 18, 2019

Date



Kathleen A. Theoharides

Comments Received:

10/11/2019 Massachusetts Department of Environmental Protection (MassDEP)/Western Regional Office (WERO)

KAT/AJS/ajs



Department of Environmental Protection

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October 11, 2019

Kathleen A. Theoharides, Secretary
Executive Office of Energy & Environmental Affairs
Massachusetts Environmental Policy Act Office
Alex Strycky, EEA No. 16040
100 Cambridge Street, 9th Floor
Boston, MA 02114-2524

Re: Specialty Minerals, Inc.
Quarry Minerals Management EIR
Adams, MA

Dear Secretary Theoharides,

The Massachusetts Department of Environmental Protection (MassDEP), Western Regional Office (WERO) appreciates the opportunity to comment on the Single Environmental Impact Report (SEIR) submitted for the proposed Quarry Minerals Management landfill project at 260 Columbia Street in Adams (EEA #16040). The applicable MassDEP regulatory and permitting considerations regarding wastewater, air pollution, solid waste, and waste site cleanup are discussed.

I. Project Description

Specialty Minerals, Inc. (SMI) located at 260 Columbia Avenue, in Adams, proposes to establish a new on-site, solid waste disposal area for mineral solids generated by their limestone processing. The disposal area will cover a 72-acre portion of the existing quarry and receive an annual average of 310 tons per day (tpd) of mineral solid waste. As the mining/quarrying operations expand to the north on the parcel, and the existing solids disposal sites reach capacity, SMI (the Proponent) proposes to reclaim the currently active, 350 feet deep quarry by landfilling mining and processing residuals over the next 50 years. Filling will proceed in Phases (cells) of approximately 5 years intervals; interim closures and final grades of the disposal area will be loamed and seeded.

The facility will accept solely mined and processed mineral materials from the SMI processes; no other solid waste or off-site material will be disposed. The Proponent will continue to recycle as much of the residuals as markets will allow. Excess material will be disposed on-site. The landfill construction is proposed similarly to the existing three on-site disposal areas that have or will reach capacity.

Groundwater suppression and stormwater management are currently accomplished through pumping water from a collection area at the deepest section of the active pit to

the regulated settling ponds and stormwater system. That practice will continue initially. As the fill project proceeds into the future, the deepest part of the quarry will eventually be filled with unprocessed rock material (not considered solid waste) derived from mining, to an elevation of 760 feet above mean sea level (fmsl), to maintain, conservatively a minimum of 4 feet separation of disposed material above the estimated high groundwater. Landfill design and stormwater management design are intended to keep stormwater from infiltrating disposed materials. A 12-inch diameter gravity collection pipe, to be installed following the filling of the quarry to an elevation of 760 fmsl will collect stormwater and any infiltrating groundwater and direct it to the settling ponds and subsequently discharging to the Hoosic River.

The project triggers a Mandatory Environmental Impact Report (EIR) threshold for the disposal of 150 or more tpd of new capacity at a solid waste facility.

The project requires a *BAW SW 01 - Site Suitability Report for a New Site Assignment* and a *BAW SW 26 New Large Landfill* from MassDEP. Each cell (phase) may also require an *Authorization to Operate* permits from MassDEP. The closure design of cells and the final closure of the landfill will also require *Corrective Action Design* permit(s). MassDEP will send a copy of the *Site Suitability* report to the Town of Adams; the project also requires approval of the proposal through a *Site Assignment* from the Adams Board of Health.

The project Proponent indicates all work is outside of wetlands jurisdictional areas and the Proponent has not proposed any changes to the surface water discharge permit.

There are no changes to the project as proposed in the Expanded Environmental Notification Form. Environmental impacts associated with this project include:

- Construction of a 72 Acres solid waste (mineral waste) landfill.

II. Required Mass DEP Permits and/or Applicable Regulations

Wetlands

310 CMR 10.00

Water Pollution Control

314 CMR 3.00

Air Pollution

310 CMR 7.00

Solid Waste

310 CMR 16.00

Bureau of Waste Site Cleanup

310 CMR 40.000

III. Permit Discussion

Bureau of Water Resources

Wetlands and Waterways

The Proponent has stated there are no impacts to wetland resource areas or buffer zones. MassDEP notes the Proponent has made this determination through the review of MassGIS wetlands resource area data layers. MassDEP advises the Proponent to conduct a more thorough review of potential impacts to resource areas as MassGIS data

layers are not detailed enough to preclude jurisdiction. In January 2013, the Adams Conservation Commission issued an Amended Order of Resource Delineation for the area near the existing landfills and it is suggested the delineation is reviewed relative to this project to determine if additional field investigation is necessary.

Wastewater

The Proponent states there is no anticipated change to the discharge relative to the NPDES discharge permit.

Bureau of Air and Waste

Air Pollution Control

MassDEP's previous comments remain valid.

Solid Waste

The Proponent adequately responded to the requirements of the SEIR Scope. Additional details of solid waste permitting will be addressed in part through the Individual Rule Project permitting process and through the individual permits for his proposed Phased project. MassDEP's previously submitted comments on the EENF remain valid, except as outlined below.

- The Proponent states that the Quarry Minerals Management Area will be outside the 1000-foot setback to the nearest residences (along Old Columbia Street). To clarify, it is our understanding that clean fill (rockwaste and crusher waste) will be placed in the portion of the landfill area within the 1,000-foot setback to residences; regulated solid waste material (pond solids and Fluosolids dust) will be placed in the remaining portion of the landfill area outside the 1,000-foot setback to residences. MassDEP reiterates previous comment that the Proponent is advised to clearly demonstrate through the permitting process, procedures to ensure and verify that only clean, (unprocessed) natural materials will be placed within the 1000-foot setback to the residences. In addition, the Proponent is advised to ensure mitigation of noise and nuisance dust conditions within the 1000-foot setback is adequate.
- MassDEP notes a typographical correction in that the permit applications are referred to as BRP SW01 and BRP SW26. The correct application citations are: *BAW SW 01 - Site Suitability Report for a New Site Assignment* and a *BAW SW 26 New Large Landfill*. MassDEP will send a copy of the *Site Suitability* report to the Town of Adams; the project also requires approval of the proposal through a *Site Assignment* from the Adams Board of Health. As noted, each cell (phase) may also require an *Authorization to Operate* permits from MassDEP. The closure design of cells and the final closure of the landfill will also require *Corrective Action Design* permit(s).

Greenhouse Gas Analysis

MassDEP's previous comments remain valid.

MassDEP acknowledges that the Proponent estimates, based on EPA data referenced in the SEIR, carbon sequestration benefit will be provided by the 72 acres of plants proposed for the closure as well as the 72 acres of soils. As described by the EPA document cited, carbon sequestration in the soil is nearly three times (3x) the amount of the carbon sequestered in the vegetative cover.

Bureau of Waste Prevention

MassDEP's previous comments remain valid.

IV. Section 61 Findings

The proponent has presented proposed Section 61 Findings in the SEIR for this project. MassDEP has reviewed these findings and finds them to be satisfactory. However, additional assessment and/or alternative mitigation measures may be necessitated based on the submittal of detailed information as part of the solid waste permitting process.

V. Other Comments/Guidance

If you have any questions regarding this comment letter, please do not hesitate to contact Kathleen Fournier at (413) 755-2267.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Michael Gorski
Regional Director

cc: MEPA File