

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION
1 NATIONAL LIFE DRIVE
MONTPELIER, VERMONT 05620-3522

FACT SHEET
February 2014

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

FILE NO.: 11-16
PROJECT ID NO.: RU96-0010
NPDES NO: VT0001155
PERMIT NO.: 3-1392

NAME AND ADDRESS OF APPLICANT:

Omya, Inc.
61 Main Street
Proctor, VT 05765

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Hogback Quarry
North Fire Hill Road
Pittsford, Vermont

RECEIVING WATERS AND CLASSIFICATION: Unnamed tributary to Otter Creek and an unnamed tributary to Smith Pond; Class B. Class B waters are suitable for bathing and recreation; irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable of public water supply with filtration and disinfection.

I. Proposed Action, Type of Facility, and Discharge Location

The above named applicant has applied to the Vermont Department of Environmental Conservation for renewal of its permit to discharge into the designated receiving waters. The facility is in engaged in quarrying operations.

The complete application, draft permit, and other information are on file and may be inspected at the VTDEC, Watershed Management Division, Montpelier, VT. Copies will be made at a cost based on the previous Secretary of State Official Fee Schedule for Copying Public Records from 8:00 am to 4:30 pm, Monday through Friday.

II. Description of Discharge

This permit authorizes the discharge of 0.8 MGD, monthly average, to an unnamed tributary of Otter Creek via S/N 001 and the discharge of 0.8 MGD, monthly average, to an unnamed tributary of Smith Pond via S/N 002 of treated mined dewatering water and process wastewater from the Hogback Quarry. A quantitative description of the discharge in terms of significant effluent parameters is presented in section IV. below.

III. Limitations and Conditions

The effluent limitations of the permit, the monitoring requirements, and any implementation schedule (if required), may be found on the following pages of the permit:

Effluent Limitations: Page 2 and 3

Monitoring Requirements: Page 2 and 3

IV. Permit Basis and Explanation of Effluent Limitation Derivation

History & Summary

Omya, Inc. owns and operates the Hogback Quarry in Pittsford, VT. The quarry produces marble for use in Omya's calcium carbonate manufacturing process. There are two discharge points for this quarry.

Discharge point S/N 001 is located at the north end of the quarry. Dewatering water and process wastewater is pumped from a sump to a settling pond. The treated wastewater is then discharged to an existing swale to wetlands contiguous with a small unnamed tributary which flows into a small pond. The pond overflow is then discharged into an unnamed tributary of Otter Creek.

Discharge points S/N 002 is at the south end of the quarry. Dewatering water and process wastewater is pumped from a sump to three settling ponds for treatment prior to discharge. The settling ponds can operate in series or water can be directly pumped into the last pond, then discharged. The discharge flows through a swale and into an unnamed tributary of Smith Pond.

On December 16, 2013, Omya, Inc. submitted an application for renewal of their discharge permit. Having completed its review of the application, the Agency has made a tentative determination to renew the discharge permit for this discharge. The following is a discussion of the specific factors considered in the renewal of this permit.

Effluent Limitations

Discharge Point S/N 001

Flow

The permit contains a flow limitation of 0.8 MGD, monthly average and is unchanged from the current permit. Daily flow monitoring is required. The discharge from this quarry is seasonal. During the spring, dewatering of the quarry is necessary to remove the water that has collected during the winter and the facility typically has a constant discharge for a three to four week period.

After the "spring dewatering period", discharges from the quarry occur as necessary during the operational season to manage any runoff that has collected in the quarry or any process wastewater that has been generated during quarrying operations.

Total Suspended Solids (TSS)

The permit contains a TSS concentration limitation of 25 mg/l, daily maximum and is unchanged from the current permit and is based on EPA guidance documents which indicate that a properly designed and operated treatment system from a quarry should be able to consistently and reliably produce an effluent of 25 mg/l or less. Sampling is once per week during the spring dewatering period. During normal quarrying operations, TSS sampling is required once per month.

Turbidity

The permit contains a turbidity limitation of 25 NTU, annual average, during dry weather conditions. This limitation is based on Section 3-04.B of the Vermont Water Quality Standards effective December 30, 2011. During the spring dewatering period, turbidity sampling is required once per week. During normal quarrying operations, turbidity sampling is required monthly.

Perchlorate

The draft permit contains a "monitor only" requirement for Perchlorate. Perchlorate is present in some types of explosives used in the mining and quarrying industry and was detected in the discharge from this quarry. Therefore perchlorate monitoring was required by the current permit. Based on a review of Perchlorate data collected during the term of the current permit the perchlorate concentration detected in this discharge is consistently very low, Therefore perchlorate sampling has been reduced to twice per (June and September) to confirm that these concentrations remain consistently low.

pH

The permit contains a pH limitation of 6.5 to 8.5 SU. This limitation is unchanged from the current permit and is based on Section 3-01.B.9 of the Vermont Water Quality Standards effective December 30, 2011. pH sampling is required once per week during the spring dewatering period and once per month during normal quarrying operations.

Total Metals Analyses and Total Nutrient Analyses

Concentrations of heavy metals have been detected with some mineral formations in this state. Therefore to ensure that excessive concentrations of heavy metals are not associated with the calcium carbonate being removed from this quarry, the permit contains condition which requires that this discharge be sampled for the following total metals: antimony, arsenic, cadmium, chromium, copper, iron, lead, nickel, selenium, silver, and zinc. Sampling is required once during the operating season and once during the spring dewatering season. Based upon the results of these analyses or any other similar analyses conducted on this discharge, the permit may be amended to require additional analyses or establish specific effluent limitations.

In addition the Agency is gathering data on various types of discharges and their potential to cause or contribute to instream eutrophication, therefore the draft permit requires that the discharges be sampled for total phosphorus and total nitrogen.

Based upon the results of these analyses or any other similar analyses conducted on this discharge, the permit may be amended to require additional analyses or establish specific effluent limitations

Discharge Point S/N 002**Flow**

The permit contains a flow limitation of 0.8 MGD, monthly average and is unchanged from the current permit. Daily flow monitoring is required. The discharge from this quarry is seasonal. During the spring, dewatering of the quarry is necessary to remove the water that has collected during the winter and the facility typically has a constant discharge for a three to four week period. After the "spring dewatering period", discharges from the quarry occur as necessary during the operational season to manage any runoff that has collected in the quarry or any process wastewater that has been generated during quarrying operations.

Total Suspended Solids (TSS)

The permit contains a TSS concentration limitation of 25 mg/l, daily maximum, and is unchanged from the current permit and is based on EPA guidance documents which indicate that a properly designed and operated treatment system from a quarry should be able to consistently and reliably produce an effluent of 25 mg/l or less. Sampling has been increased to once per week during the spring dewatering period. During normal quarrying operations, TSS sampling is required once per month.

Turbidity

The permit contains a turbidity limitation of 25 NTU, annual average, during dry weather conditions. This limitation is based on Section 3-04.B of the Vermont Water Quality Standards effective December 30, 2011. During the spring dewatering period, turbidity sampling is required once per week. During normal quarrying operations, turbidity sampling is required once per month.

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Total Metals and Total Nutrient Analyses

Concentrations of heavy metals have been detected with some mineral formations in this state. Therefore to ensure that excessive concentrations of heavy metals are not associated with the calcium carbonate being removed from this quarry, the permit contains a condition which requires that this discharge be sampled for the following total metals: antimony, arsenic, cadmium, chromium, copper, iron, lead, nickel, selenium, silver, and zinc. Sampling is required once during the operating season and once during the spring dewatering season.

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Additional Permit Conditions

Condition I.A.4.a requires the permittee to ensure that there is adequate distance between the accumulated sediments in the quarry sump and the pump intakes to prevent the pumping of solids

to the settling ponds.

Condition I.A.4.b requires the permittee to provide written notice to the Agency prior to starting quarrying operations in the spring.

V. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from February 18, 2014 through March 20, 2014.

During this time interested persons may submit their written views on the draft permit. All written comments will be retained by the Department and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Department. Written comments should be sent to:

Vermont Agency of Natural Resources
Department of Environmental Conservation
Watershed Management Division
1 National Life Drive
Building 2 Main
Montpelier, VT 05620-3522

Comments may also be faxed to: 802-828-1544 or submitted by e-mail using the e-mail comment provisions included at <http://www.anr.state.vt.us/dec/waterq/ww/htm/notices.htm>.

Any interested person or groups of persons may request or petition for a public hearing with respect to this draft permit. Any such request or petition for a public hearing shall be filed within the public comment period described above and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted.

The Department will hold a hearing if there is significant public interest in holding such a hearing. Any public hearing brought in response to such a request or petition will be held in the geographical area of the draft discharge or other appropriate area, at the discretion of the Department and may, as appropriate, consider related groups of draft permits. Any person may submit oral or written statements and data concerning the draft permit at the public hearing. The Department may establish reasonable limits on the time allowed for oral statements and may require the submission of statements in writing. All statements, comments, and data presented at the public hearing will be retained by the Department and considered in the formulation of the final determination to issue, deny, or modify the draft permit.

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