

AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WASTEWATER MANAGEMENT DIVISION  
103 SOUTH MAIN STREET  
WATERBURY, VERMONT 05671-0405

FACT SHEET  
December 2011

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

FILE NO.: 01-11  
PROJECT ID NO.: RU96-0029  
NPDES NO: VT0000990  
PERMIT NO.: 3-0349

NAME AND ADDRESS OF APPLICANT:

OMYA, Inc.  
62 Main Street  
Proctor, VT 05765

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

"Middlebury Quarry"  
1975 Route 7 South  
Middlebury, VT

RECEIVING WATERS AND CLASSIFICATION: Foster Brook and Muddy Brook, 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 a renewal of a discharge permit to discharge into the designated receiving water. The discharge is from the Middlebury Quarry, Middlebury, VT to Foster Brook and Muddy Brook. The facility is a quarry operation with dust control.

II. Description of Discharge

This permit authorizes the discharge of a commingled wastewater consisting of quarry dewatering water, quarry process water from a dust control and stormwater runoff. 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  
Monitoring Requirements: Page 2

#### IV. Permit Basis and Explanation of Effluent Limitation Derivation

##### **History & Summary**

OMYA, Inc owns and operates the "Middlebury Quarry" in Middlebury, VT. The quarry process consists of the extraction of marble for use in OMYA's production facility. Several sources of wastewater are generated on the site and commingle in the collection and treatment system prior to discharge. Specifically:

1. Quarry Dewatering Water is generated at the site. Stormwater and groundwater seepage is removed from the quarry to allow for the removal of rock.
2. Quarry Operations Waste water is used for various purposes, including dust suppression for transportation and drilling activities.
3. Stormwater Runoff is generated on the site from haul roads, storage piles, buildings, etc is conveyed via swales, culverts, and grading back into the quarry.

The Agency has determined that the commingled discharges from the quarrying and stone crushing operations are subject to 40 CFR Part 436, Subpart B – Crushed Stone Subcategory. Subpart B defines process generated wastewater as follows:

“(e) The term “process generated waste water” shall mean any waste water used in the slurry transport of mined material, air emissions control, or processing exclusive of mining. The term shall also include any other water which becomes commingled with such waste water in a pit, pond, lagoon, mine, or other facility used for treatment of such waste water.”

Since the quarry dewatering water and the site stormwater runoff combine with the water from dust control in the treatment facility (Sedimentation Sump) the entire commingled discharge from the Sedimentation Sump is defined as process wastewater and subject to the terms and condition of this permit.

The Department has made a determination to reissue a discharge permit for this discharge. Following is a discussion of the specific factors considered in the renewal of this permit.

##### **Effluent Limitations**

Water is discharged from the quarry at two different locations. Specifically:

S/N 001: Water from the southern end of the quarry is collected in a sedimentation sump, then pumped from the quarry through a series of swales and is discharged into Foster Brook.

S/N 002: Water from the northern end of the quarry is collected in a sedimentation sump then pumped from the quarry and through series of swales and is discharged into Muddy Brook.

##### **Flow**

The flow limitation is 2.8 mgd, maximum day. This limitation applies to the combined discharge from S/N 001 and S/N 002 and is unchanged from the previous permit. Flow monitoring is required daily. The discharge from this facility is variable and depends on the operation of the quarry, rainfall, and groundwater seepage.

**Turbidity**

The permit contains a turbidity limitation of 10 NTU, annual average, during dry weather conditions. This limitation is based on Section 3-04.B of the Vermont Water Quality Standards effective January 1, 2008. This limitation applies to both discharge points and is unchanged from the previous permit. Turbidity sampling is required once per month.

**Total Suspended Solids (TSS)**

The permit contains a TSS limitation of 10 mg/l. This limitation applies to both discharge points. This limitation is based on the best professional judgment of the Agency regarding the proper operation of this type of treatment system and is unchanged from the previous permit. TSS sampling is required once per month.

**pH**

A pH limitation has been included in this permit. The proposed pH limitation is 6.5 to 8.5 SU. and is based on Section 3-01.B.9 of the Vermont Water Quality Standards. pH sampling will be required once per month.

**Metals and Nutrients**

Since heavy metals are occasionally associated with rock formations in the state, Condition A.3. requires the permittee to conduct a total metals (antimony, arsenic, cadmium, chromium, copper, iron, lead, nickel, selenium, silver, and zinc) analysis of each discharge point by June 30, 2013.

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

**Other Permit Conditions**

Condition A.4.a requires the quarry to be dewatered as necessary to maintain a constant water level below the production block.

Condition A.4.b. requires the pump inlets at the sedimentation sumps shall be located sufficiently above the top layer of any settled material to prevent pumping settled solids to the receiving water.

Condition A.4.c. requires that material removed from the sumps or settling basins shall be disposed of in accordance with applicable state and federal regulations.

Condition A.4.d. requires that the area downgradient of the discharge points be inspected regularly for signs of erosion and any erosion corrected.

Condition A.4.e. requires the permittee to immediately implement a spill prevention and control plan and take all reasonable steps to prevent any equipment spills or leaks from entering the wastewater treatment system.

**Perchlorate**

Since blasting has been done at this quarry, the draft permit contains a monitoring requirement for perchlorate. Perchlorate was present in some types of explosives previously used in the mining and quarrying industry and has been detected in the discharges from other quarries.

Therefore perchlorate monitoring is being required. Specifically, perchlorate sampling is required once during May and September 2014.

#### VI. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from December 12, 2011 through January 12, 2012, during that 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  
Wastewater Management Division - Sewing Building  
103 South Main Street  
Waterbury, VT 05671-0405

Comments may also be submitted by e-mail using the e-mail comment provisions included at <http://www.anr.state.vt.us/dec/ww/Drafts.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.

The complete application, proposed permit, and other information are on file; and may be inspected at the VANR, VSAC Building, East Allen Street, Winooski, VT. Copies of the permit may be obtained by calling (802) 338-4809; cost of copies is 10 cents per page or at [www.anr.state.vt.us/dec/ww/wwmd.cfm](http://www.anr.state.vt.us/dec/ww/wwmd.cfm). Office hours are 7:45 a.m. to 4:30 p.m., Monday through Friday