

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION
ONE NATIONAL LIFE DRIVE, MAIN BUILDING, 2ND FLOOR
MONTPELIER, VT 05620-3522

FACT SHEET
(APRIL 2016)

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

PERMIT NO: 3-1409
PIN: BR76-0002
NPDES NO: VT0001210

NAME AND ADDRESS OF APPLICANT:

Smugglers' Notch Management Co. Ltd
4323 VT Route 108 South
Jeffersonville, VT 05464

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Smugglers' Notch Water Treatment Facility
VT Route 108
Jeffersonville, Vermont

RECEIVING WATER: Unnamed tributary of the Brewster River

CLASSIFICATION: Class B. Class B waters are suitable for swimming and other forms of water-based recreation, and irrigation of crops and other agricultural uses without treatment; good aesthetic value; aquatic biota and wildlife sustained by high quality aquatic habitat; suitable for boating, fishing, and other recreational uses; acceptable for public water supply with filtration and disinfection.

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

The Vermont Agency of Natural Resources (Agency) received a renewal application for the permit to discharge into the designated receiving water from the above-named applicant on July 3, 2014. The facility is engaged in the treatment of surface water via coagulation, sand filtration and chlorination to provide potable drinking water; the filter backwash generated from this treatment process is discharged to a sedimentation basin and then conveyed to an outfall S/N 001 to an unnamed tributary of the Brewster River. At this time the Agency has made a tentative decision to reissue the discharge permit.

II. Description of Discharge

This permit authorizes the discharge of filter backwash effluent produced during the treatment of raw surface water via coagulation, filtration and chlorination. A quantitative description of the discharge in terms of significant effluent parameters is based on state and federal laws and regulations, the discharge permit application, and the recent self-monitoring data.

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 and Summary: The Smugglers' Notch Management Co., Ltd. owns and operates the Smugglers' Notch Water Treatment Facility. The original facility was constructed in the 1970s and the water treatment system's rapid sand pressure filters were installed in 1980 to process surface water to potable drinking water for the Smugglers' Notch Resort area.

Potable Water Flow: Raw water is drawn from an on-stream impoundment (Morse Reservoir) and travels via gravity to the water treatment building. The treatment method includes flocculation, coagulation, and rapid sand filtration treatment for inorganics and particulate removal via three (3) mixed media filters. After filtration, the water passes through a meter for flow monitoring, pH is adjusted with sodium hydroxide (soda ash), sodium hypochlorite is added continuously for disinfection and the water is then pumped to covered storage reservoirs for ultimate distribution throughout the resort.

Filter Backwash Effluent: Potable water is used to backwash the filters on an as needed basis. The filter backwash effluent passes through a meter for flow measurement and is then conveyed by pipe outside the building to a drywell, and then through a ditch to a lined, gravel sedimentation basin. After passing through the sedimentation basin, a system of underdrains conveys the water through a culvert and ditch to a pond located near the main entrance. Water from this pond flows to an outfall (S/N 001) to an unnamed tributary of the Brewster River.

A grab sample of the discharge from the sedimentation basin is collected monthly and analyzed for pH, turbidity, chlorine (free) and temperature.

The sedimentation basin is inspected routinely, at least once per month during grab sampling, for accumulation of solids and for flow-through. Accumulated sediments are removed biennially in accordance with the permit and moved to a storage area for drying.

Floor Drains: The floor drains, sink and emergency eyewash station inside the water treatment building discharge to the sedimentation basin. Sodium hypochlorite and sodium hydroxide chemicals are stored with secondary containment.

Discharge Flow – S/N 001: The discharge only occurs when the filters are backwashed, as needed. Average daily flows during filter backwash are typically around 4000 gallons. The effluent flow limitation for S/N 001 has been lowered to 14,000 gallons per day, monthly average, from the previous limit of 0.360 million gallons per day (MGD). This flow limitation reduction is based on current and historic flow volumes.

Discharges are seasonal with the approximate flow proportions as follows: Dec-Mar = 22%, Apr-May = 9%, Jun-Aug = 44%, Sep-Nov = 25%. The use of the surface water source may be stopped during periods of time when the turbidity of surface water source unusually high. If no discharge occurs on a given day or month, no monitoring is required for that time period. However, completion and submission of a Discharge Monitoring Report Form (WR-43) is still required.

Turbidity – The turbidity discharge limitation of 10 NTU and monthly monitoring requirement remain unchanged from the current permit. If a turbidity sample exceeds the limit, then the permittee shall immediately collect another sample of the discharge at the discharge culvert just before the S/N 001 point of discharge and analyze for turbidity. If that second sample is in compliance with the permit limit, the discharge shall be deemed to comply with the effluent limitation.

Total Residual Chlorine – The total residual chlorine (TRC) discharge limit of 20 µg/L and monthly monitoring requirement remain unchanged from the current permit. If a TRC sample exceeds the limit, then the permittee shall immediately collect another sample of the discharge at the discharge culvert just before First Pond (the S/N 001 point of discharge) and analyze for TRC. If that second sample is in compliance with the limit, the discharge shall be deemed to comply with the effluent limitations.

pH – The pH limitation remains 6.5-8.5 Standard Units as specified in Section 3-01.B.9 in the Vermont Water Quality Standards. Monitoring for pH at S/N 001 is required monthly.

V. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from **April 25, 2016 through May 24, 2016** during which time interested persons may submit their written views on the draft permit. All written comments received by 4:30 PM on **May 24, 2016** will be retained by the Agency and considered in the formulation of the final determination to issue, deny or modify the draft permit. The comment period may be extended at the discretion of the Agency.

Written comments should be sent to:

Agency of Natural Resources
Department of Environmental Conservation
Watershed Management Division
One National Life Drive, Main Building, 2nd Floor
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://dec.vermont.gov/watershed>.

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 Agency 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 proposed discharge or other appropriate area, at the discretion of the Agency 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 Agency 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 Agency and considered in the formulation of the final determination to issue, deny, or modify the draft permit.

The complete application, draft permit, and other information are on file and may be inspected by appointment on the 2nd floor of the Main Building at One National Life Drive, Montpelier, Vermont. Copies may be obtained by calling 802-828-1535 from 7:45 AM to 4:30 PM Monday through Friday, and will be made at a cost based upon the current Secretary of State Official Fee Schedule for Copying Public Records. The draft permit and fact sheet may also be viewed on the Division's website at <http://dec.vermont.gov/watershed>.