

AGENCY OF NATURAL RESOURCES  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
WATERSHED MANAGEMENT DIVISION  
ONE NATIONAL LIFE DRIVE, MAIN BUILDING, 2<sup>ND</sup> 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: 3-0324  
PIN: BR99-0287  
NPDES NO: VT0000884

**NAME AND ADDRESS OF APPLICANT:**

Worcester Fire District #1  
P.O. Box 105  
Worcester, VT 05682

**NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:**

Worcester Fire District #1 Water Treatment Facility  
64 Worcester Village Road  
Worcester, Vermont

**RECEIVING WATER:** North Branch of the Winooski 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 November 13, 2014. The facility is engaged in the treatment of drinking water; the wastewater generated from this process is discharged after treatment from outfall S/N 001 to the North Branch of the Winooski 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 process wastewater produced during the treatment of groundwater into potable water. 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: Pages 2

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

#### *History and Summary:*

The Worcester Fire District #1 owns and operates the Water Treatment Facility. The original facility was constructed in 1979 to process well water to potable drinking water.

**Potable Water Flow:** Raw water is drawn from a well located behind the Filter House located at 64 Worcester Village Road. The raw water is treated with sodium hypochlorite and passes through a sand filter. An 8" pipe feeds this treated water to the 4" water main for distribution, as well as a 100,000 gallon reservoir storage tank that is accessible from Minister Brook Road. The reservoir storage tank is divided into two chambers, and is outfitted with valves to control the volume of each chamber independently.

**Process Wastewater Flow:** The sand filters are backwashed two times per month. The filter backwash water flows out of the Filter House via a 4" pipe into a 2,000 gallon underground surge tank, and then, via a 1" pipe, into a 2,000 gallon settling tank (baffled septic tank type). The 1" pipe controls the rate of flow into the settling tank and prevents the washout of previously settled sludge. The treated wastewater is monitored via a sampling chamber prior to being discharged through a 4" pipe (S/N 001) into a ditch that drains into the North Branch of the Winooski River.

**Floor Drains:** The floor drains in the Filter House discharge to the surge and settling tanks. Therefore, only chemicals used in the operation of this plant may be stored in the building, and those chemicals must be properly stored using secondary containment pallets or another appropriate spill containment system.

#### **Flow –**

**S/N 001:** The discharge frequency of the wastewater is typically twice per month. The effluent flow limitation for S/N 001 remains 2,500 gallons per day, maximum.

The Permittee shall monitor the parameters two times per year. The first sampling shall occur before June 30. Two Discharge Monitoring Report (DMR) forms WR-43 shall be submitted annually: July 15 and January 15.

**S/N 002:** This discharge occurs only when the reservoir storage tank is being cleaned (every two years). In preparation for cleaning, the incoming flow of treated water to one of the chambers is shut off, and the reserve is depleted. A small amount of water remaining

in the chamber is discharged via S/N 002, and may reach Minister Brook. The effluent from this discharge point shall be monitored when a discharge is occurring. Results shall be reported on the subsequent DMR form WR-43.

**Turbidity** – The limitation of 10 NTU remains unchanged from the current permit. This limit is based on Section 3-04.B of the Vermont Water Quality Standards.

**Total Residual Chlorine** – The Total Residual Chlorine limit of 1.0 mg/L remains unchanged from the current permit.

**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.

**Solids Management** – Sludge monitoring and removal activities shall be noted on the subsequent DMR form WR-43.

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

The public comment period for receiving comments on this draft permit is from **April 11, 2016 through May 11, 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 11, 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 period of comment 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, 2<sup>nd</sup> 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://www.watershedmanagement.vt.gov/>

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 2<sup>nd</sup> 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 Watershed Management Division's website at <http://www.watershedmanagement.vt.gov/>