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

FACT SHEET
September 2006

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

FILE NO.: 03-11
PROJECT ID NO.: SJ87-0002
PERMIT NO.: 3-1290
NPDES No.: VT0100579

NAME AND ADDRESS OF APPLICANT:

Town of St Johnsbury
1187 Main Street
Suite 2
St Johnsbury, VT 05819

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

St. Johnsbury Wastewater Treatment Facility
799 Bay Street
St. Johnsbury, Vermont

RECEIVING WATER AND CLASSIFICATION: Passumpsic River: Class B with a waste management zone. 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. A waste management zone is a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings.

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 water. The facility is engaged in the treatment of domestic wastewater from the Town of St. Johnsbury. The discharge is from the St. Johnsbury Wastewater Treatment Facility (WWTF) outfall to the Passumpsic River.

II. Description of Discharge

This permit authorizes the discharge of 1.6 MGD of treated municipal wastewater. The treatment system is considered secondary treatment of wastewater and consists of primary clarifiers, rotating biological contact (RBC) units and secondary clarification followed by chlorination for disinfection and then dechlorination prior to discharge.

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:	Pages 4, 5, and 6

IV. Permit Basis and Explanation of Effluent Limitation Derivation

History & Summary

On January 26, 2004 the Town submitted an application for renewal of their discharge permit. The wastewater treatment facility provides wastewater treatment capacity for both existing residential and commercial properties and for new development, in areas that lie within the Town of St. Johnsbury.

Having completed its review of the application, the Department has made a determination to renew the discharge permit for the wastewater treatment facility's discharge. Following is a discussion of the specific factors considered in the renewal of this permit.

Effluent Limitations

Flow

This permit includes a flow limitation of 1.6 MGD, annual average, based on the design capacity of the facility. This is unchanged from the previous permit. Flow monitoring is required daily. This facility maintains a continuous discharge.

Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS)

The BOD_5 mass limitations are 400 lbs/day, monthly average, and 600 lbs/day, weekly average, and are unchanged from the previous permit. The BOD_5 effluent concentration limits are 30 mg/l, monthly average, and 45 mg/l, weekly average. These limitations are set in accordance with the limitations specified for secondary treatment in 40 CFR Part 133.102. These limitations are unchanged from the previous permit.

The TSS mass limitations are 400 lbs/day, monthly average, and 600 lbs/day, weekly average. The TSS effluent concentration limits are 30 mg/l, monthly average, and 45 mg/l, weekly average. These limitations are set in accordance with the limitations specified for secondary treatment in 40 CFR Part 133.102. These limitations are unchanged from the previous permit.

In addition, the permit contains a 50 mg/l, maximum day, BOD and TSS limitation. This is a limitation which the Agency implements to supplement the federal technology based limitations to prevent a gross one-day permit effluent violation to be offset by multiple weekly and monthly sampling events which would enable a discharger to comply with the weekly average and monthly average permit limitations. These limitations are unchanged from the previous permit.

The sampling frequency for BOD and TSS is once per week and is unchanged from the previous permit.

Escherichia coli bacteria
The *E. coli* limitation is 77/100ml, instantaneous maximum and is based on Section 3-04.B.3 of the Vermont Water Quality Standards effective July 2, 2000. This limitation is unchanged from the previous permit. Sampling is being increased from once per month to twice per month to be consistent with other discharges of this size.

Settleable Solids
The Settleable Solids limitation is 1.0 ml/l, instantaneous maximum and is established in support of the narrative standard in Section 3-01.B.5 of the Vermont Water Quality Standards effective July 2, 2000. This limitation is unchanged from the previous permit. Sampling is required once per day and is unchanged from the previous permit.

Total Residual Chlorine
The Total Residual Chlorine limitation is 0.1 mg/l, instantaneous maximum. This limitation will ensure that the instream water quality criteria of chlorine of 0.019 mg/l, (acute) and 0.011 mg/l (chronic) of the Vermont Water Quality Standards effective July 2, 2000 is met. This limitation is unchanged from the previous permit. Total residual chlorine sampling is required once per day and is unchanged from the previous permit.

pH
The pH limitation of 6.5 to 8.5 SU, daily maximum is based on Section 3-01.B.9 of the Vermont Water Quality Standards effective July 2, 2000. This limitation is unchanged from the previous permit. Sampling is required once per day and is unchanged from the previous permit.

Waste Management Zone
The previous permit established a waste management zone in the Passumpsic River beginning at the outfall of the St. Johnsbury Wastewater Treatment Facility and extending downstream for 4.8 miles. The draft permit will maintain this waste management zone.

Total Kjeldahl Nitrogen (TKN)
To ensure that the discharge does not contain excessive nitrogen based compounds during the summer months, the draft permit contains a seasonal "monitoring only" requirement for Total Kjeldahl Nitrogen. This requirement is unchanged from the previous permit. TKN monitoring is required once month and is unchanged from the previous permit.

Toxicity Testing and Conventional Pollutant Monitoring
Based on the results of the Whole Effluent Toxicity (WET) tests conducted on this discharge, the Department has determined that this discharge does not have the potential to cause an instream toxic impact.

However to ensure compliance with 40 CFR 122.21.j, at the time of permit renewal, a requirement (Condition I.E) to conduct WET testing has been included in the draft permit. This Condition requires one two species acute WET test to be done in 2008, and one in 2010. The species to be tested are fathead minnow and daphnia and the time of year the test will be conducted will alternate between winter and late summer to ensure representative sampling is done. In addition, per the requirements of 40 CFR 122.21.j, annual monitoring for temperature, Dissolved Oxygen, Oil & Grease, Nitrate/Nitrite,Total Dissolved Solids, Ammonia and Total Phosphorus, has been included in the draft permit.

Combined Sewer Overflows (CSOs)
There are approximately 25 CSO discharges within the St. Johnsbury collection system. The Agency issued Amended 1272 Order No. 3-1290A to St. Johnsbury on August 29, 2006 which mandated a schedule to complete construction to reduce or eliminate some of these discharges, and to conduct an effectiveness study to assess the work done to date and to determine the most cost effective way to eliminate the remaining overflow discharges. The draft permit authorizes these discharges during storm events provided St. Johnsbury is meeting the terms and conditions of the 1272 Order.

Additional Conditions
The following conditions are in the previous permit and also have been included in the draft permit.

Condition I.A.2. states that if the Department of Environmental Conservation establishes a wasteload allocation for discharge S/N 001, the permit may be reopened and modified to include effluent limitations of Ultimate Oxygen Demand (UOD). Also, should attaining compliance with the UOD limitations require the design, purchase, installation, and start-up of pollution control equipment, then a reasonable schedule for completion of these activities shall be established.

Condition I.A.3. requires that St. Johnsbury limit the volume of septage received such that it does not interfere with the proper operation of the wastewater treatment facility or result in the failure to meet effluent limitations. If the Department of Environmental Conservation determines that the volume of septage being received interferes with the proper operation of the wastewater treatment facility or results in the failure to meet effluent limitations, then the permit may be reopened and a limitation on the volume of septage received established.

VI. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from September 18, 2006 through October 18, 2006 during which 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 faxed to: 802-241-2596.

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, draft permit, and other information are on file and may be inspected at the VTDEC, Wastewater Management Division, Waterbury Office. 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 4:00 pm, Monday through Friday.