

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

FACT SHEET  
(August 2004, amended October 2004)

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

NPDES NO: VT0100200  
FILE NO: 10-15  
PERMIT NO: 3-1241  
PROJECT ID NO: SJ98-0033

NAME AND ADDRESS OF APPLICANT:

City of Newport  
222 Main Street  
Newport, VT 05855

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Newport Wastewater Treatment Facility  
Treatment Plant Lane  
Newport, Vermont

RECEIVING WATER: Clyde River

CLASSIFICATION: 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 for 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 applied on March 31, 2004 to the Vermont Department of Environmental Conservation for an amendment to the permit to discharge into the designated receiving water. At this time the Department has made a tentative decision to issue an amended discharge permit. The facility is engaged in the treatment of municipal wastewater. The discharge is from the outfall of the City of Newport Wastewater Treatment Facility to the Clyde River.

## II. Description of Discharge

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:	Pages 2 and 3 of 21
Monitoring Requirements:	Pages 5 – 8 of 21
Implementation Schedule:	1272 Order

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

The City of Newport owns and operates the Newport Wastewater Treatment Facility which receives wastewater from the city as well as portions of the Town of Derby. A primary facility was built in 1965 and upgraded to secondary treatment (conventional activated sludge) in 1983. Disinfection consists of gas chlorination followed by dechlorination. A combined sewer overflow project was completed in 1994 which consisted of sewer separation in portions of the city. Eight of the City's twelve pump stations were upgraded during the past five year permit term. This included the Coventry P.S., Bay Street P.S., Gateway P.S., Fyfe Drive P.S., Glen Road Prison P.S., Chamberlain-Birch P.S., Bluff Road P.S., and Indianhead P.S. (The Lakemont P.S. was installed in 2001 and Prouty Beach P.S. was installed in 1999.)

The proposed upgrade will include the installation of a new headworks structure with a grit removal system and a mechanical fine screen; a new septage receiving facility; new influent pumps and controls; new fine-bubble aeration system with new aeration blowers; a new building with new liquid chlorination and dechlorination systems; new gas compressors and control systems for the anaerobic sludge digesters; and the availability of spare parts for the primary and secondary clarifiers.

**Flow** - The effluent flow limitation is currently 1.2 MGD, annual average, representing the facility's design flow. Following Department approval of the upgrade/expansion, the flow limitation will increase to 1.3 mgd. The facility maintains a continuous discharge.

**Biochemical Oxygen Demand (BOD<sub>5</sub>)** - The effluent limitations for biochemical oxygen demand are proposed to remain unchanged following the upgrade/expansion. The monthly average (30 mg/l) and weekly average (45 mg/l) reflect the minimum level of effluent quality specified for secondary treatment in 40 CFR Part 133.102. In addition, the permit contains a 50 mg/l, maximum day, BOD limitation. This is the Department standard applied to all such discharges pursuant to 13.4 c. of the Vermont Water Pollution Control Permit Regulations. The Agency implements the limit 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. Mass limits (300 lbs/day, monthly average and 450 lbs/day, weekly average) are derived by multiplying the concentration limits by the permitted flow of 1.2 mgd. The weekly monitoring frequency is proposed to remain the same following the upgrade/expansion.

**Total Suspended Solids (TSS)** - The effluent limitations for total suspended solids are proposed to remain unchanged following the upgrade/expansion. The monthly average (30 mg/l) and weekly average (45 mg/l) reflect the minimum level of effluent quality specified for secondary treatment in 40 CFR Part 133.102. In addition, the permit contains a 50 mg/l, maximum day, TSS limitation. This is the Department standard applied to all such discharges pursuant to 13.4 c. of the Vermont Water Pollution Control Permit Regulations. The Agency implements the limit 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. Mass limits (300 lbs/day, monthly average and 450 lbs/day, weekly average) are derived by multiplying the concentration limits by the permitted flow of 1.2 mgd. The weekly monitoring frequency is proposed to remain the same following the upgrade/expansion.

**pH** - The pH limitation is 6.5 - 8.5 Standard Units as specified in Section 3-01 B.9. in the Vermont Water Quality Standards, effective July 2, 2000. The current limitation and daily monitoring are proposed to remain the same following the upgrade/expansion.

**Settleable Solids** - The current limitation of 1.0 ml/l instantaneous maximum and daily monitoring are proposed to remain the same following the upgrade/expansion. This numeric limit was established in support of the narrative standard in Section 3-01 B.5. of the Vermont Water Quality Standards, effective July 2, 2000.

**Total Phosphorus** - The current limitations of 0.8 mg/l, monthly average, and 8.0 lbs/day, monthly average are proposed to remain unchanged following the upgrade/expansion. The concentration limit is based on requirements in Title 10, Chapter 47 §1266a. The mass limit of 8.0 lbs/day, monthly average, is derived by multiplying the concentration limit by the permitted flow of 1.2 mgd. The weekly monitoring frequency is proposed to remain the same following the upgrade/expansion.

***E. coli* Bacteria** - The *E. coli* limitation is 77/100 ml as specified in Section 3-04 B.3., Vermont Water Quality Standards, effective July 2, 2000. The effluent limit and twice monthly monitoring frequency are proposed to remain the same following the upgrade/expansion.

**Total Residual Chlorine (TRC)** - The TRC limit of 0.1 mg/l is based on meeting the instream water quality acute and chronic chlorine criteria (0.019 mg/l and 0.011 mg/l respectively) in the Vermont Water Quality Standards, effective July 2, 2000 for the protection of aquatic biota. The current limitation and daily monitoring are proposed to remain the same following the upgrade/expansion.

**Waste Management Zone** - As defined under 10 V.S.A. §1251(16), 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. Throughout the receiving waters, water quality criteria must be achieved but increased health risks exist due to the authorized discharge”.

The permit describes the existing waste management zone (WMZ) that extends downstream from the outfall for approximately 0.25 miles in the Clyde River. Based on the Department’s waste management zone model, the length of the existing WMZ will be sufficient following the upgrade/expansion and is therefore proposed to remain unchanged in length.

**Other Special Conditions** – Special Condition I.A.8. requires that prior to construction of the proposed upgrade detailed operating procedures which will assure proper operation of the facility and compliance with effluent limits be submitted to the Department for review and written approval.

The upgraded facility will be considered complete when the City notifies the Department, by means of an engineer’s certification, that the upgraded facility is operational, spare parts are available, and the Department issues a written acknowledgment of its operational status. In addition, the City must provide an engineer’s assessment that any remaining combined sewer overflows (CSOs) in the collection system comply with the 2.5 inch, 24 hour storm event specified in the Agency’s Combined Sewer Overflow Control Policy (Special Condition I.A.9.).

Special Condition I.A.10. addresses septage capacity. Newport’s proposed facility must conform to the provisions of 10 V.S.A. §1626a, awards for wastewater treatment plants with a capacity of 250,000 gallons or more per day. The proposed plant capacity must be sufficient to receive, treat and dispose of septage in a quantity equivalent to the ratio of 4,000 gpd of septage for each 1 million gpd of facility hydraulic capacity. Thus the facility must reserve 5,200 gpd and its equivalent BOD organic capacity for septage receiving.

Special Condition I.A.11. requires that specific spare parts for *both* the primary and secondary clarifiers be kept in stock at all times. Those parts are necessary to provide an adequate level of redundancy for the increased hydraulic capacity should one of the two existing primary or secondary clarifiers be out of service. With the specified spare parts on hand, any repairs to the mechanical components above the liquid level can be completed in a timely manner, thereby minimizing the down time for the clarifiers.

**Anti-degradation Findings** – In order to issue a discharge permit for the proposed facility expansion, the Department must first determine that the project is consistent with the Anti-Degradation Policy set forth in section 1-03 of the Water Quality Standards. On the basis of its review of the permit application, the Department has found the proposal to be consistent with the requirements of the Anti-Degradation Policy. Specifically, the permitted effluent limits will remain the same following the upgrade such that no increase in mass loadings will occur.

V. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from October 25 through November 24, 2004 during which time interested persons may submit their written views on the draft permit. All written comments received by 4:30 PM on November 24, 2004 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 proposed 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 current Secretary of State Official Fee Schedule for Copying Public Records from 8:00 AM to 4:30 PM, Monday through Friday. The draft permit and fact sheet may also be viewed on the Division's website at [www.anr.state.vt.us/dec/ww/wwmd.cfm](http://www.anr.state.vt.us/dec/ww/wwmd.cfm).

*No comments were received during the public notice period.*

Newport WWTF

# LAKE MEMPHREMAGOG

