State of Vermont

VT0100064

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation
State Geologist
RELAY SERVICE FOR THE HEARING IMPAIRED
1-800-253-0191 TDD>Voice
1-800-253-0195 Voice>TDD

AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation
Wastewater Management Division
103 South Main Street - Sewing Bldg.
Waterbury, Vermont 05671-0405

Telephone: (802) 241-3822
Fax: (802) 241-2596
www.anr.state.vt.us/dec/ww/wwmd.cfm

DB 5/24

CVT rec'd 5/19/04 SAW

May 13, 2004

Stephen Barrett
211 Fairground Road
Brattleboro, VT 05301

Re: Final Discharge Permit #3-1242

Dear Mr Barrett:

Enclosed is your copy of the above referenced permit, which has been signed by the Director of the Wastewater Management Division for the Commissioner of the Department of Environmental Conservation. Please read the permit carefully and familiarize yourself with all its terms and conditions. Your attention is particularly directed to those conditions which may require written responses by certain dates.

If you have any questions concerning your permit, please contact Carol Carpenter at 241-3828.

Sincerely,

Brian D. Kooiker
Chief, Discharge Permits Section

Enclosure

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

Permit No. 3-1242
File No. 13-02
Project ID No. NS97-0153
NPDES No. VT0100064

Name of Applicant: Town of Brattleboro
211 Fairground Road
Brattleboro, VT 05301

Expiration Date: June 30, 2009

DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act as amended (hereinafter referred to as the "Act") and the Federal Clean Water Act, as amended (33 U.S.C. §1251 et seq), the Town of Brattleboro, Vermont (hereinafter referred to as the "permittee") is authorized by the Secretary, Agency of Natural Resources, Waterbury, Vermont, to discharge from the Brattleboro Wastewater Treatment Facility to the Connecticut River in accordance with the following general and special conditions.

This permit shall become effective on July 1, 2004 and shall expire on June 30, 2009.

Jeffrey Wennberg, Commissioner
Department of Environmental Conservation

By: Christine Thompson Date: May 14, 2004
Christine Thompson, Director
Wastewater Management Division

I. SPECIAL CONDITIONS

A. EFFLUENT LIMITS

1. Until June 30, 2009 the permittee is authorized to discharge from S/N 001 - outfall, the Brattleboro Wastewater Treatment Facility, to the Connecticut River, an effluent whose characteristics shall not exceed the values listed below:

DISCHARGE LIMITATIONS							
Effluent Characteristic	**Monthly Average**	**Weekly Average**	**Maximum Day**	**Monthly Average**	**Weekly Average**	**Maximum Day**	**Instantaneous Maximum**
	.....	(lbs / day)	.....	.....	(Concentration)		.....
Flow (Annual Avg)				3.0 mgd			
Biochemical Oxygen Demand, 5-day, 20° C	751	1126		30 mg/l	45 mg/l	50 mg/l	
Total Suspended Solids	751	1126		30 mg/l	45 mg/l	50 mg/l	
Settleable Solids							1.0 ml/l
Total Residual Chlorine					1.0 mg/l		2.0 mg/l
Escherichia coli Bacteria							77/100 ml
pH				Between 6.5 and 8.5 Standard Units			

2. The effluent shall not have concentrations or combinations of contaminants including oil, grease, scum, foam, or floating solids which would cause a violation of the water quality standards of the receiving waters.

3. The discharge shall not cause visible discoloration of the receiving waters.

4. The monthly average concentrations of BOD_5 and total suspended solids in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD_5 and total suspended solids in the influent into the permittee's wastewater treatment facilities. For the purposes of determining whether the permittee is in compliance with this condition, samples from the discharge and the influent shall be taken with appropriate allowance for detention times. See Part I, Special Conditions, Paragraph G.2., Effluent Monitoring.

5. When the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the permitted flow limitation, the permittee shall submit to the permitting authority projected loadings and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

6. Any action on the part of the Agency of Natural Resources in reviewing, commenting upon or approving plans and specifications for the construction of wastewater treatment facilities shall not relieve the permittee from the responsibility to achieve effluent limitations set forth in this permit and shall not constitute a waiver of, or act of estoppel against any remedy available to the Agency, the State of Vermont or the federal government for failure to meet any requirement set forth in this permit or imposed by state or federal law.

B. WASTE MANAGEMENT ZONE

In accordance with 10 V.S.A. Section 1252, this permit hereby establishes a waste management zone that extends from the outfall of the Brattleboro Wastewater Treatment Facility in the Connecticut River west of the New Hampshire/Vermont border downstream one mile.

C. WHOLE EFFLUENT TOXICITY TESTING

The permittee shall complete the following whole effluent toxicity testing:

a. One acute Whole Effluent Toxicity (WET) test on Pimephales promelas, conducted on a 24-hour composite effluent sample taken during the month of **August or September 2005**. The results shall be submitted to the Department by October 31, 2005.

b. One acute Whole Effluent Toxicity (WET) test on Ceriodaphnia dubia, conducted on a 24-hour composite effluent sample taken during the month of **August or September 2006**. The results shall be submitted to the Department by October 31, 2006.

c. One acute Whole Effluent Toxicity (WET) test on Pimephales promelas, conducted on a 24-hour composite effluent sample taken during the month of **January or February 2007**. The results shall be submitted to the Department by March 31, 2007.

d. One acute Whole Effluent Toxicity (WET) test on Ceriodaphnia dubia, conducted on a 24-hour composite effluent sample taken during the month of **January or February 2008**. The results shall be submitted to the Department by March 31, 2008.

Whole Effluent Toxicity tests shall be conducted in accordance with the Methods recommended by EPA: Peltier, W And Weber, CI, Methods for Measuring Acute Toxicity of Effluents to Freshwater and Marine Organisms (the most recent edition).

Based upon the results of these tests or any other tests conducted on this discharge, this permit may be amended to include effluent limitations, or to require additional testing, or to require a Toxicity Reduction Evaluation.

D. ENGINEERING EVALUATION AND REPORT

By **December 31, 2005**, the permittee shall conduct an in-depth engineering inspection/evaluation of the wastewater treatment facility and shall submit a written report of the results to the Agency. The engineering inspection and report shall be conducted and prepared in accord with the following conditions:

A professional engineer with experience in the design and operation of municipal wastewater treatment facilities shall be hired to perform an in-depth inspection of the wastewater treatment facility, pump stations, collection system, and manholes. At the treatment facility, all components which are critical to the treatment process or which could adversely affect effluent quality in the event of their failure shall be inspected. Such components shall include (but are not limited to): grit removal systems, comminutors, tank and partition integrity, biological systems, aeration systems, piping, clarifier drives and chlorination and dechlorination systems, flow metering systems, any critical and necessary valves, sludge handling equipment (digesters and appurtenances), etc.

The inspection is to be comprised of visual observation of equipment operability and condition as well as a review of maintenance records to determine recurring equipment problems and to estimate future life. Calibration checks shall be performed on all flow meters.

The resulting written inspection report shall document the components inspected, their condition, and include recommendations for currently needed repairs or replacements and/or the need for on-site spare parts. The projected date of replacement or major rehabilitation of each component and the anticipated cost shall be estimated. The permittee shall determine how the future anticipated costs will be met and advise the Department in a letter transmitted with the written inspection report. The Department recommends an annual set-aside to a sinking fund so that funds are immediately available for the necessary rehabilitations or replacements.

Should the Department determine that certain critical components are in need of repair or replacement due to the results of the inspection report, this permit may be reopened and amended to include an implementation schedule for repair or replacement of those components.

E. REAPPLICATION

If the permittee desires to continue to discharge after the expiration of this permit, the permittee shall reapply on the application forms then in use at least 180 days before this permit expires.

Reapply for a Discharge Permit by: December 31, 2008.

F. OPERATING FEES

This discharge is subject to operating fees. The permittee shall submit the operating fees in accordance with the procedures provided by the Secretary.

G. MONITORING AND REPORTING

1. Sampling and Analysis

The sampling, preservation, handling, and analytical methods used shall conform to regulations published pursuant to Section 304(g) of the Clean Water Act, under which such procedures may be required. Guidelines establishing these test procedures have been published in the Code of Federal Regulations, Title 40, Part 136 (Federal Register, Vol. 56, No. 195, July 1, 1999 or as amended).

If applicable, *Escherichia coli* shall be tested using test method 9213 D. found in Standard Methods for the Examination of Water and Wastewater, 18th or subsequent edition(s).

Samples shall be representative of the volume and quality of effluent discharged over the sampling and reporting period. All samples are to be taken during normal operating hours. The permittee shall identify the effluent sampling location used for each discharge.

2. Effluent Monitoring

The permittee shall monitor and record the quality and quantity of discharge(s) S/N 001 - outfall, the Brattleboro Wastewater Treatment Facility, according to the following schedule and other provisions until June 30, 2009.

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous	Daily Total, Max., Min.
BOD_5	1 x weekly (1)	24 hour composite

TSS	1 x weekly (1)	24 hour composite
Settleable Solids	1 x daily	grab (2)
Escherichia coli Bacteria	1 x weekly (1)	grab (3)
Total Residual Chlorine	1 x daily	grab (3)
pH	1 x daily	grab

(1) BOD, TSS and *E. coli* monitoring shall be twice monthly during the months of November through March.

(2) Settleable Solids samples shall be collected between 10:00 a.m. and 2:00 p.m. or during the period of peak flow.

(3) On the day that the *Escherichia coli* grab sample is collected, the daily total residual chlorine grab sample for that day shall be collected at the same time and location as the *E. coli* sample. Samples shall be collected between the hours of 6:00 a.m. to 6:00 p.m.

Annually, by December 31, the permittee shall monitor and submit the results for the following parameters:

Temperature
Ammonia (as N)
Dissolved Oxygen
Oil & Grease
Nitrate/Nitrite
Total Kjeldahl Nitrogen
Total Phosphorus
Total Dissolved Solids

Grab samples shall be used for temperature, ammonia, dissolved oxygen, and oil & grease. All other parameters shall be composite samples. Samples shall be representative of the seasonal variation in the discharge.

3. Influent Monitoring

The permittee shall monitor the quality of the influent according to the following schedule and other provisions.

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Influent BOD_5	2 x monthly	8 - hour composite, minimum (1)
Influent TSS	2 x monthly	8 - hour composite, minimum (1)

(1) Composite samples for BOD_5 and TSS shall be taken during the hours of 6:00 a.m. to 6:00 p.m., unless otherwise specified. Eight hours is the minimum period for the composite.

4. Reporting

The permittee is required to submit monthly reports of monitoring results on form WR-43. Reports are due on the 15th day of each month, beginning with the month following the effective date of this permit.

If, in any reporting period, there has been no discharge, the permittee must submit that information by the report due date.

Signed copies of these, and all other reports required herein, shall be submitted to the Secretary at the following address:

Agency of Natural Resources
Department of Environmental Conservation
Wastewater Management Division
103 South Main Street
Waterbury, Vermont 05671-0405

All reports shall be signed:

a. In the case of corporations, by a principal executive officer of at least the level of vice president, or his/her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the permit form originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

In addition to the monitoring and reporting requirements given above, daily monitoring of certain parameters for operational control are required by the Agency. Operations reports (reporting form WR-43) shall be submitted monthly.

5. Recording of Results

The permittee shall maintain records of all information resulting from any monitoring activities required, including:

a. The exact place, date, and time of sampling;
b. The dates and times the analyses were performed;
c. The person(s) who performed the analyses;

d. The analytical techniques and methods used including sample collection handling and preservation techniques;
e. The results of all required analyses;
f. The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;
g. The original calculation and data bench sheets of the operator who performed analysis of the influent or effluent pursuant to requirements of Section I.(A) of this permit.

The results of monitoring requirements shall be reported (in the units specified) on the Vermont reporting form WR-43 or other forms approved by the Secretary.

6. Additional Monitoring

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form WR-43. Such increased frequency shall also be indicated.

H. DRY WEATHER FLOWS

Dry weather flows of untreated municipal wastewater from any sanitary or combined sewers are not authorized by this permit and are specifically prohibited by State and Federal laws and regulations.

I. EMERGENCY ACTION - ELECTRIC POWER FAILURE

The permittee shall indicate in writing to the Secretary **within 30 days after the effective date of this permit** that the discharge shall be handled in such a manner that, in the event the primary source of electric power to the waste treatment facilities (including pump stations) fails, any discharge into the receiving waters will attempt to comply with the conditions of this permit, but in no case shall the wastes receive less than primary treatment (or its equivalent) plus disinfection.

The permittee shall either provide an alternative source of power for the operation of its treatment facilities, or demonstrate that the treatment facility has the capacity to store the wastewater volume that would be generated over the duration of the longest power failure that would have affected the facility in the last five years, excluding catastrophic events.

The alternative power supply, whether from a generating unit located at the plant site or purchased from an independent source of electricity, must be separate from the existing power source used to operate the waste treatment facilities. If a separate unit located at the plant site is to be used, the permittee shall certify in writing to the Secretary when the unit is completed and prepared to generate power.

The determination of treatment system storage capacity shall be submitted to the Wastewater Management Division upon completion.

J. SEWER ORDINANCE

The permittee shall have in effect a sewer use ordinance acceptable to the Secretary which, at a minimum, shall

1. Prohibit the introduction by any discharger into the permittee's sewerage system or treatment facilities of any pollutant which:

   a. is a toxic pollutant in toxic amounts as defined in standards issued from time to time under Section 307(a) of the Clean Water Act;

   b. creates a fire or explosion hazard in the permittee's treatment works;

   c. causes corrosive structural damage to the permittee's treatment works, including all wastes with a pH lower than 5.0;

   d. contains solid or viscous substances in amounts which would cause obstruction to the flow in sewers or other interference with proper operation of the permittee's treatment works; or

   e. in the case of a major contributing industry, as defined herein, contains an incompatible pollutant, as further defined herein, in an amount or concentration in excess of that allowed under standards or guidelines issued from time to time pursuant to Sections 304, 306, and/or 307 of the Clean Water Act.

2. Require 45 days prior notification to the permittee by any person or persons of a:

   a. proposed substantial change in volume or character of pollutants over that being discharged into the permittee's treatment works at the time of issuance of this permit;

   b. proposed new discharge into the permittee's treatment works of pollutants from any source which would be a new source as defined in Section 306 of the Clean Water Act if such source were discharging pollutants; or

   c. proposed new discharge into the permittee's treatment works of pollutants from any source which would be subject to Section 301 of the Clean Water Act if it were discharging such pollutants.

3. Require any industry discharging into the permittee's treatment works to perform such monitoring of its discharge as the permittee may reasonably require, including the installation, use, and maintenance of monitoring equipment methods, to keep records of the results of such monitoring, and to report the results of such monitoring to the permittee. Such records shall be made available by the permittee to the Secretary upon request.

4. Authorize the permittee's authorized representatives to enter into, upon, or through the premises of any industry discharging into the permittee's treatment works to have

access to and copy any records, to inspect any monitoring equipment or method required under subsection 3 above, and to sample any discharge into the permittee's treatment works.

The permittee shall notify the Secretary of any discharge specified in subsection 2 above within 30 days of the date on which the permittee is notified of such discharge. This permit may be modified accordingly.

II. GENERAL CONDITIONS

A. MANAGEMENT REQUIREMENTS

1. Facility Modification / Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Such a violation may result in the imposition of civil and/or criminal penalties as provided for in Section 1274 and 1275 of the Vermont Water Pollution Control Act. Any anticipated facility expansions or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new permit application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

In addition, the permittee shall provide notice to the Secretary of the following:

a. any new introduction of pollutants into the treatment works from a source which would be a new source as defined in Section 306 of the Clean Water Act if such source were discharging pollutants;

b. except for such categories and classes of point sources or discharges specified by the Secretary, any new introduction of pollutants into the treatment works from a source which would be subject to Section 301 of the Clean Water Act if such source were discharging pollutants; and

c. any substantial change in volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into such works at the time of issuance of the permit.

The notice shall include:

i. the quality and quantity of the discharge to be introduced into the system, and

ii. the anticipated impact of such change in the quality or quantity of the effluent to be discharged from the permitted facility.

2. Noncompliance Notification

In the event the permittee is unable to comply with any of the conditions of this permit due, among other reasons, to:

a. breakdown or maintenance of waste treatment equipment (biological and physical-chemical systems including, but not limited to, all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units),

b. accidents caused by human error or negligence, or

c. other causes such as acts of nature,

the permittee shall notify the Secretary within 24 hours of becoming aware of such condition or by the next business day and shall provide the Secretary with the following information, in writing, within five (5) days:

i. cause of non-compliance

ii. a description of the non-complying discharge including its impact upon the receiving water;

iii. anticipated time the condition of non-compliance is expected to continue or, if such condition has been corrected, the duration of the period of non-compliance;

iv. steps taken by the permittee to reduce and eliminate the non-complying discharge; and

v. steps to be taken by the permittee to prevent recurrence of the condition of non-compliance.

3. Operation and Maintenance

All waste collection, control, treatment, and disposal facilities shall be operated in a manner consistent with the following:

a. The permittee shall, at all times, maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

b. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to insure compliance with the conditions of this permit; and

c. The operation and maintenance of this facility shall be performed only by qualified personnel. The personnel shall be certified as required under the Vermont Water Pollution Abatement Facility Operator Certification Regulations.

4. Quality Control

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at regular intervals to ensure accuracy of measurements, or shall ensure that both activities will be conducted.

The permittee shall keep records of these activities and shall provide such records upon request of the Secretary.

The permittee shall demonstrate the accuracy of the flow measurement device weekly and report the results on the monthly report forms. The acceptable limit of error is ± 10%.

The permittee shall analyze any additional samples as may be required by the Agency of Natural Resources to ensure analytical quality control.

5. Bypass

The diversion or bypass of facilities (including pump stations) necessary to maintain compliance with the terms and conditions of this permit is prohibited, except where authorized under the terms and conditions of an Emergency Pollution Permit issued pursuant to 10 V.S.A. Section 1268.

6. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any adverse impact to waters of the State resulting from non-compliance with any condition specified in this permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, and shall be submitted to Department representatives upon request. This period shall be extended during the course of unresolved litigation regarding the discharge of pollutants or when requested by the Secretary.

8. Solids Management

Collected screenings, sludges, and other solids removed in the course of treatment and control of wastewaters shall be stored, treated and disposed of in accord with t

10 V.S.A., Chapter 159 and with the terms and conditions of any certification, interim or final, transitional operation authorization or order issued pursuant to 10 V.S.A., Chapter 159 that is in effect on the effective date of this permit or is issued during the term of this permit.

9. Emergency Pollution Permits

Maintenance activities, or emergencies resulting from equipment failure or malfunction, including power outages, which result in an effluent which exceeds the effluent limitations specified herein, shall be considered a violation of the conditions of this permit, unless the permittee immediately applies for, and obtains, an emergency pollution permit under the provisions of 10 V.S.A., Chapter 47, Section 1268. The permittee shall notify the Department of the emergency situation by the next working day.

10 V.S.A., Chapter 47, Section 1268 reads as follows:

"When a discharge permit holder finds that pollution abatement facilities require repairs, replacement or other corrective action in order for them to continue to meet standards specified in the permit, he may apply in the manner specified by the secretary for an emergency pollution permit for a term sufficient to effect repairs, replacements or other corrective action. The permit may be issued without prior public notice if the nature of the emergency will not provide sufficient time to give notice; provided that the secretary shall give public notice as soon as possible but in any event no later than five days after the effective date of the emergency pollution permit. No emergency pollution permit shall be issued unless the applicant certifies and the secretary finds that:

(1) there is no present, reasonable alternative means of disposing of the waste other than by discharging it into the waters of the state during the limited period of time of the emergency;

(2) the denial of an emergency pollution permit would work an extreme hardship upon the applicant;

(3) the granting of an emergency pollution permit will result in some public benefit;

(4) the discharge will not be unreasonably harmful to the quality of the receiving waters;

(5) the cause or reason for the emergency is not due to wilful or intended acts or omissions of the applicant."

Application shall be made to the Secretary of the Agency of Natural Resources, Department of Environmental Conservation, 103 South Main Street, Waterbury, Vermont 05671-0405.

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the Secretary or authorized representative, upon the presentation of proper credentials:

a. to enter upon the permittee's premises in which an effluent source or any records required to be kept under terms and conditions of the permit are located;

b. to have access to and copy any records required to be kept under the terms and conditions of the permit;

c. to inspect any monitoring equipment or method required in the permit; or

d. to sample any discharge of pollutants.

2. Transfer of Ownership or Control

This permit is not transferable without prior written approval of the Secretary. All application and operating fees must be paid in full prior to transfer of this permit. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall provide a copy of this permit to the succeeding owner or controller and shall send written notification of the change in ownership or control to the Secretary. The permittee shall also inform the prospective owner or operator of their responsibility to make an application for transfer of this permit. This application must include as a minimum; a written statement from the prospective owner or operator certifying:

a. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership.

b. The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit.

c. The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.

d. The date of the sale or transfer.

The Department may require additional information dependent upon the current status of the facility operation, maintenance, and permit compliance.

3. Confidentiality

Pursuant to 10 V.S.A. 1259(b):

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

FACT SHEET
(April 2004)

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

NPDES NO: VT0100064
FILE NO: 13-02
PERMIT NO: 3-1242
PROJECT ID NO: NS97-0153

NAME AND ADDRESS OF APPLICANT:

Town of Brattleboro
211 Fairground Road
Brattleboro, VT 05301

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Brattleboro Wastewater Treatment Facility
340 Riverside Drive
Brattleboro, Vermont

RECEIVING WATER: Connecticut 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 January 2, 2004 to the Vermont Department of Environmental Conservation for renewal of the permit to discharge into the designated receiving water. At this time the Department has made a tentative decision to issue a renewal of the previously issued discharge permit. The facility is engaged in the treatment of municipal wastewater. The discharge is from the outfall of the Town of Brattleboro Wastewater Treatment Facility to the Connecticut 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:	Page 2 of 18
Monitoring Requirements:	Pages 3 through 6 of 18

IV. Permit Basis and Explanation of Effluent Limitation Derivation

The Town of Brattleboro owns and operates the Brattleboro Wastewater Treatment Facility which provides secondary treatment and disinfection of municipal wastewater. The facility consists of primary clarification followed by rotating biological contactors (RBCs) and secondary clarifiers to achieve secondary treatment and liquid chlorine to provide disinfection. Sludge is disposed of by either land application (out of state) or is trucked to a landfill.

Flow - The effluent flow limitation remains at 3.0 mgd, annual average, representing the facility's design flow. The facility maintains a continuous discharge.

Biochemical Oxygen Demand (BOD_5) - The effluent limitations for biochemical oxygen demand remain unchanged from the previous permit. 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. The daily maximum limit (50 mg/l) is the Department standard applied to all such discharges pursuant to 13.4 c. of the Vermont Water Pollution Control Permit Regulations. Mass limits (751 lbs/day, monthly average and 1126 lbs/ day, weekly average) are derived by multiplying the concentration limits by the permitted flow. The BOD monitoring requirement has been changed from twice monthly to weekly in the summer months (April through October) and is unchanged at twice monthly during the winter months. This is consistent with similarly sized facilities.

Total Suspended Solids (TSS) - The effluent limitations for total suspended solids remain unchanged from the previous permit. 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. The daily maximum limit (50 mg/l) is the Department standard applied to all such discharges pursuant to 13.4 c. of the Vermont Water Pollution Control Permit Regulations. Mass limits (751 lbs/day, monthly average and 1126 lbs/day, weekly average) are derived by multiplying the concentration limits by the permitted flow. The TSS monitoring requirement has been changed from twice monthly to weekly in the summer months (April through October) and is unchanged at twice monthly during the winter months. This is consistent with similarly sized facilities.

pH - The pH limitation remains at 6.5 - 8.5 Standard Units as specified in Section 3-01 B.9. in the Vermont Water Quality Standards, effective July 2, 2000. Monitoring remains at daily.

Settleable Solids - The limitation of 1.0 ml/l instantaneous maximum and daily monitoring remain unchanged from the previous permit. 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.

***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 monitoring frequency is proposed to be changed from twice monthly to weekly in the summer months (April through October) and remains at twice monthly during the winter months. This is consistent with similarly sized facilities.

Total Residual Chlorine (TRC) - The TRC limits of 1.0 mg/l, weekly average, and 2.0 mg/l, instantaneous maximum, are based on meeting the 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. Daily monitoring is required.

Toxicity Testing - 40 CFR Part 122.44(d)(1) requires the Department to assess whether the discharge causes, has the reasonable potential to cause, or contribute to an excursion above any narrative or numeric water quality criteria. In addition, Part 122.21 requires all publicly owned treatment works (POTW) with flows greater than or equal to one mgd to complete a minimum of four WET tests.

Based on the results of the Whole Effluent Toxicity and/or toxic pollutant testing conducted by the Department in 1994 and by the Town in 2000, 2003, and 2004 this discharge did not have an instream toxic impact. The proposed permit includes (Part I.C.) four one-species acute WET tests during the term of the permit to ensure compliance with Part 122.21 at the time of permit renewal.

Additional Monitoring - For all facilities with a design flow of greater than 0.1 mgd, 40 CFR § 122.21(j), Application for a permit, requires the submittal of monitoring data for those parameters identified in Condition I.G.2. of the permit.

Samples must be collected once annually during various seasons (ie. include each of the four quarters during the permit period) and the results submitted by December 31 of each year.

Engineering Evaluation and Report - Since this wastewater treatment facility has reached its 20 year design life, an engineering evaluation condition was included in the permit (Part I.D.). This condition requires the permittee to conduct an in-depth engineering inspection and report of the treatment facility to identify currently needed repairs as well as equipment, processes, and other possible deficiencies which may adversely affect effluent quality or the proper operation of the treatment facility. This report must be submitted to the Department by December 31, 2005.

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 proposed permit retains the existing waste management zone (WMZ) that extends downstream from the outfall for approximately one mile in the Connecticut River.

Electric Power Failure - Within 30 days of the effective date of the permit, the permittee must submit to the Department, updated documentation addressing how the discharge will be handled in the event of an electric power outage. The effluent must receive a minimum of primary treatment plus disinfection.

V. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from April 12 through May 12, 2004 during which time interested persons may submit their written views on the draft permit. All written comments received by 4:30 PM on May 12, 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

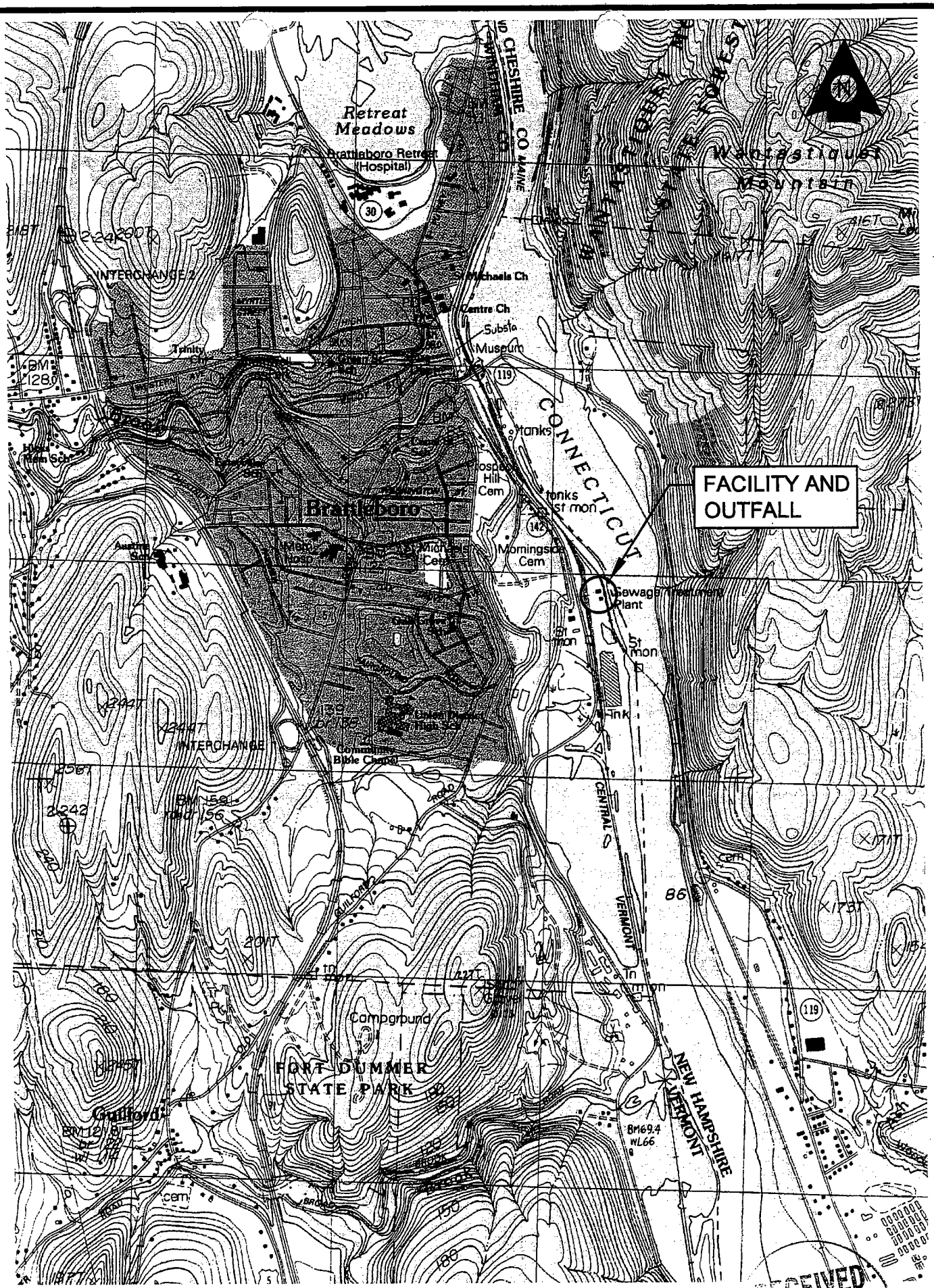
Comments may also be faxed to: 802-241-2596.

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 4:00 PM, Monday through Friday.

No comments were received during the public notice period.



TOWN OF BRATTLEBORO, VT
WWTF & OUTFALL LOCATION
SCALE: 1:25,000

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