



## State of Vermont

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](http://www.anr.state.vt.us/dec/ww/wwmd.cfm)

April 28, 2005

Ms Laurie Adams  
City of Burlington Public Works Department  
PO Box 878  
Burlington, VT 05402

**Re: Final Discharge Permit #3-1331**

Dear Ms Adams:

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.

We have made the two minor changes to the final permit as you requested during the notice period. The term 'Grab samples' has been changed to 'Samples' in order to include the composite samples and the language requiring notification of flowrates and sample times has been removed from page 7 of the permit.

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

Sincerely,

Brian D. Kooiker, Chief  
Discharge Permits Section

Enclosure

cc: Steve Foster, Burlington Main WWTF

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

Permit No. 3-1331  
File No. 04-02  
Project ID No. EJ95-0269  
NPDES No. VT0100153

Name of Applicant: City of Burlington  
PO Box 878  
Burlington, VT 05402


Expiration Date: June 30, 2010

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 City of Burlington, Vermont (hereinafter referred to as the "permittee") is authorized by the Secretary, Agency of Natural Resources, Waterbury, Vermont, to discharge from the **Burlington Main Wastewater Treatment Facility** to Lake Champlain in accordance with the following general and special conditions.

**This permit shall become effective on July 1, 2005.**

Jeffrey Wennberg, Commissioner  
Department of Environmental Conservation

By:   
Christine Thompson, Director  
Wastewater Management Division

Date: 4/28/05

# I. SPECIAL CONDITIONS

## A. EFFLUENT LIMITS

1. Until June 30, 2010, the permittee is authorized to discharge from S/N 001 - outfall, the Burlington Main Wastewater Treatment Facility, to Lake Champlain, an effluent whose characteristics shall not exceed the values listed below:

DISCHARGE LIMITATIONS								
Effluent Characteristic	Annual Limit	Monthly Average	Weekly Average	Maximum Day	Monthly Average	Weekly Average	Maximum Day	Instantaneous Maximum
			(lbs / day)			(Concentration)		
Flow (annual average)	5.3 mgd							
Biochemical Oxygen Demand, 5-day, 20° C (a)		1000 lbs	1500 lbs		30 mg/l	45 mg/l	50 mg/l	
Total Suspended Solids (a)		1000 lbs	1500 lbs		30 mg/l	45 mg/l	50 mg/l	
Total Phosphorus (Total Annual Pounds) (b)	9682 lbs				0.8 mg/l			
Total Ammonia-N					Monitor only			
Settleable Solids								1.0 ml/l
Total Residual Chlorine						0.44 mg/l		0.76 mg/l
<i>Escherichia coli</i> Bacteria								77/100 ml
Whole Effluent Toxicity, NOEL-A (c)				≥ 15%				
pH					Between 6.0 and 8.5 Standard Units			

(a) The quantity of BOD and TSS discharged shall be limited such that the effluent does not exceed either the BOD and TSS concentration or mass (lbs) limits specified above.

(b) **Total Annual Pounds of Phosphorus** discharged shall be defined as the sum of all the **Total Monthly Pounds of Phosphorus** discharged for the calendar year.

**Total Monthly Pounds of Phosphorus** discharged shall be calculated as follows:

(Monthly Average Phosphorus Concentration) x (Total Monthly Flow) x 8.34 (See Total Phosphorus monitoring report form WR43-PO4).

- (c) NOEL-A is the concentration of effluent in a sample that causes No Observed (acute) Effect (i.e. mortality not to exceed 10% of the test organisms) to the test population at the 48-hour exposure interval of observation. See Condition I.A.3. for additional WET sampling and analysis requirements.

2. Until June 30, 2010, the permittee is authorized to discharge from **Combined S/N 001 and S/N 002** – Secondary treatment process and combined sewer overflow treatment process (a), the Burlington Main Wastewater Treatment Facility, to Lake Champlain, an effluent whose characteristics shall not exceed the values listed below:

DISCHARGE LIMITATIONS								
Effluent Characteristic	Annual Limit	Monthly Average	Weekly Average	Maximum Day	Monthly Average	Weekly Average	Maximum Day	Instantaneous Maximum
	(lbs / day)				(Concentration)			
Total Suspended Solids								800 mg/l
Total Residual Oxidant, as Chlorine (b,c)								0.83 mg/l
Total Residual Oxidant, as Chlorine (b,d)								0.97 mg/l
<i>Escherichia coli</i> Bacteria								6160/100 ml

- (a) The discharge from combined S/N 001 and S/N 002, secondary treatment process and combined sewer overflow treatment process, is permitted only at times when the combined sanitary and storm influent flow exceeds a rate of 13 mgd as a result of storm induced runoff or snow melt.
- (b) When Total Residual Oxidant (TRO) measured as chlorine may include chlorine plus bromine, or bromine.
- (c) The discharge limitation applies during the period from January 1 through March 31 annually.
- (d) The discharge limitation applies during the period from April 1 through December 31 annually.

3. **Whole Effluent Toxicity** – WET testing shall be performed in accordance with the methods recommended by EPA: Peltier, W. and Weber, C.I., Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (the most recent edition), and the analysis shall include a dilution of 15% effluent.

In the event that the WET effluent limitation is exceeded *and the source of toxicity is known*, the permittee shall take immediate corrective actions, and notify the Department as required under Section II.A.2.

In the event that the WET effluent limitation is exceeded *and the source of toxicity is unknown*, the permittee shall resample immediately. If the WET confirmation sample exceeds the effluent limitation, the permittee shall submit, within 30 days of receipt of the confirmation sample results, an investigative plan to determine the cause of toxicity.

4. **Mixing Zone Establishment** - In accordance with Section 2-04 A. of the Vermont Water Quality Standards, effective July 2, 2000, this permit establishes a mixing zone encompassing an area not to exceed a 200 foot radius around the offshore diffuser outfall, and coincident with the boundaries of the waste management zone. Within the mixing zone, Sections 3-04 B.1. and 3. (Turbidity, *E coli*) and Section 3-01 B.1. and 9. (Temperature, pH) of the WQS are waived in accordance with Section 2-04 A.

5. **Disinfection System Failure Notification** – The permittee shall provide notification of a disinfection system failure by taking the following actions on occurrence of an event that interferes with the effective operation of the disinfection system for the treatment facility during a period when the system is required to be operational.

A disinfection system failure is considered to have occurred when either 1) the chlorine addition is terminated, or 2) analytical results or other first hand knowledge is received that the effluent *E. coli* level from discharge S/N 001 and/or Combined S/N001 and S/N 002 exceeds 6160/100 ml. In the event of a disinfection system failure, the permittee shall correct the failure as soon as possible and shall take the following actions at the earliest practical opportunity and in all cases within 12 hours:

- a. Notify the local health officer;
- b. Notify the DEC, Wastewater Management Division;
- c. Notify the following municipal officials:
  - Winooski City Manager,
  - Colchester Town Manager,
  - South Burlington City Manager;
  - Shelburne Town Manager;
  - City of Burlington, Department of Public Works, Water Division;
  - Champlain Water District, Water Treatment Facility;
- d. Take other such action as may be directed under the authority of the local health officer;
- e. In addition to the above actions, if the disinfection system failure occurs between the period of April 1 and October 31, then the permittee shall also take the following actions the earliest practical opportunity and in all cases within 12 hours:
  - Notify the Department of Parks and Recreation; and

Secure a notice of the possible public health hazard in at least one newspaper having general municipal coverage and on two radio stations having coverage of the local area.

6. 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.
7. The discharge shall not cause visible discoloration of the receiving waters.
8. The monthly average concentrations of BOD<sub>5</sub> and total suspended solids in the discharge (S/N 001) shall not exceed 15 percent of the monthly average concentrations of BOD<sub>5</sub> and total suspended solids in the influent into the permittee's wastewater treatment facilities with the exception that this limitation shall not apply during periods when influent flows are affected by storm events or snow melt and/or when flows are greater than a total daily flow of 5.3 mgd. 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 E.2., Effluent Monitoring.
9. 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.
10. 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 in a 200 foot radius (an area 400 feet wide by 1400 feet long) from the offshore diffuser (an area southwest of the Burlington Harbor breakwater) of the Burlington Main Wastewater Treatment Facility in Lake Champlain.

#### **C. 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 30, 2009.

#### **D. 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.

## E. 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

- a. The permittee shall monitor and record the quality and quantity of discharge(s) S/N 001 - outfall, the Burlington Main Wastewater Treatment Facility, according to the following schedule and other provisions until June 30, 2010.

Sample location: At a point after final chlorination and prior to combination with the discharge from the combined sewer overflow treatment facility.

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous	Daily Total, Max., Min.
BOD <sub>5</sub>	1 x weekly	8-hour composite <sup>(1)</sup>
TSS	1 x weekly	8-hour composite <sup>(1)</sup>
Total Phosphorus	1 x weekly	8-hour composite <sup>(1)</sup>
Settleable Solids	1 x daily	Grab <sup>(2)</sup>
Total Ammonia - N	1 x monthly	Grab <sup>(2)</sup>
<i>Escherichia coli</i> Bacteria	1 x weekly	Grab <sup>(3,4)</sup>
Total Residual Chlorine	1 x daily	Grab <sup>(3,4)</sup>
Whole Effluent Toxicity <sup>(5)</sup>	1 x annually	8-hour composite <sup>(1)</sup>
pH	1 x daily	Grab

- (1) Composite samples shall be collected on weekdays during the hours 6:00 a.m. to 6:00 p.m., unless otherwise specified. Eight hours is the minimum period for the composite.

- (2) Grab 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 and reported on the WR-43 form.
  - (4) Bacteria and chlorine samples shall be held refrigerated in the dark prior to analysis. Bacteria samples shall be held for a period of time equal to the effluent travel time between the sampling location and the exit from the diffuser, as calculated from the flow rate existing at the time the samples are collected.
  - (5) The toxicity sample shall be collected during the period June through August. Test results shall be submitted by the following October 15 annually. The analysis shall specifically include a 15% dilution. See also Condition I.A.3.
- b. The permittee shall monitor and record the quality and quantity of discharge(s) **Combined S/N 001 and 002** - outfall, secondary process and combined sewer overflow treatment process, the Burlington Main Wastewater Treatment Facility, according to the following schedule and other provisions until June 30, 2010.

Sample location: At the box culvert which includes the combined wet and dry flow (S/N 001 and 002) prior to discharge to Lake Champlain.

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous during all overflow events	Instantaneous Maximum; Total Flow
BOD <sub>5</sub>	Each event	Composite <sup>(1)</sup>
TSS	Each event	Composite <sup>(1)</sup>
Total Phosphorus	Each event	Composite <sup>(1)</sup>
Settleable Solids	Each event	Composite <sup>(1)</sup>
Total Ammonia - N	Each event	Composite <sup>(1)</sup>
<i>Escherichia coli</i> Bacteria	Each event	Grab <sup>(1,2)</sup>
Total Residual Oxidant	Each event	Grab <sup>(1,2)</sup>
pH	Each event	Grab <sup>(1)</sup>

- (1) Samples shall be collected during each combined sewer overflow event lasting greater than 30 minutes. The sample shall be collected during the period of sustained flows.
- (2) Sampling, analysis, and holding times for TRO and *E. coli* monitoring shall reflect the appropriate detention time in the offshore outfall. (The *E. coli* sample holding time shall not exceed six hours.)



3. **Annually, by December 31**, the permittee shall monitor **S/N 001** and submit the results, including units of measurement, for the following parameters:

Temperature  
Dissolved Oxygen  
Nitrate/Nitrite  
Total Kjeldahl Nitrogen  
Oil & Grease  
Total Dissolved Solids

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

4. **Influent Monitoring**

The permittee shall monitor the quality of the influent according to the following schedule and other provisions. This sample shall not be collected during periods when influent flows are affected by storm events or snow melt and/or when flows are greater than a total daily flow of 5.3 mgd.

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Influent BOD <sub>5</sub>	1 x monthly	8-hour composite, minimum (1)
Influent TSS	1 x monthly	8-hour composite, minimum (1)

- (1) Composite samples shall be collected on weekdays 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.

5. **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.

#### **6. 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.

#### **7. 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.

## F. COMBINED SEWER OVERFLOWS

Discharges from the combined sewer overflows, listed on Attachment A of this permit, are authorized by this permit during storm events only, provided the discharges do not violate Water Quality Standards and contain no septage or holding tank waste.

1. The permittee shall implement an operation and maintenance program for the combined collection system which shall include as a minimum:
  - a. litter control, street sweeping, and other pollution prevention measures as appropriate;
  - b. routine catch-basin, sewer and interceptor cleaning;
  - c. in-line grit removal;
  - d. maximizing wet-weather flow to the WWTF; and
  - e. maximum use of the collection system for storage to the extent that it doesn't cause damage to equipment or property.
2. The permittee shall implement a public notification process to ensure that the public receives adequate notification of when and where CSOs occur.
3. The permittee shall monitor the CSO outfalls (S/N 003 and 004) through November 30, 2007 in order to determine at what storm event overflows occur. This shall be accomplished by, at a minimum, installing a tell-tale block in the overflow line, checking the block after each significant precipitation event, and documenting the results including total precipitation and intensity. The results shall be submitted each month as an attachment to the discharge monitoring report (DMR).

A report, prepared by a Vermont registered Professional Engineer, detailing the results of the monitoring and whether or not overflow events comply with the Agency's 1990 Combined Sewer Overflow Control Policy shall be submitted by **December 31, 2007**.

## G. 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.

## H. 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.

## **I. 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.

5. Prohibit the connection of roof, cellar, or area surface drains, and enable the permittee to require the replacement of services that are shown to have excessive infiltration.

## **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, except the vortex separator (wet weather) effluent flow meter which shall be monthly, and report the results on the monthly report forms. The acceptable limit of error is  $\pm 10\%$ .

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.

Bypasses do not include discharges from the Combined Sewer Overflow Treatment Process during storm events. Such discharges are regulated under Part I.A. and E. above.

#### **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 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):

“Any records, reports or information obtained under this permit program shall be available to the public for inspection and copying. However, upon a showing satisfactory to the secretary that any records, reports or information or part thereof, other than effluent data, would, if made public, divulge methods or processes entitled to protection as trade secrets, the secretary shall treat and protect those records, reports or information as confidential. Any records, reports or information accorded confidential treatment will be disclosed to authorized representatives of the state and the United States when relevant to any proceedings under this chapter.”

**4. Permit Modification**

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. violation of any terms or conditions of this permit;
- b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

**5. Toxic Effluent Standards**

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Federal Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, then this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

**6. Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under 10 V.S.A. §1281.

**7. Other Materials**

Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

- a. They are not:
  - i. designated as toxic or hazardous under provisions of Sections 307 and 311, respectively, of the Clean Water Act, or
  - ii. known to be hazardous or toxic by the permittee, except that such materials indicated in (a) and (b) above may be discharged in certain limited amounts with the written approval of, and under special conditions established by, the Secretary or his designated representative, if the substances will not pose any imminent hazard to the public health or safety;
- b. The discharge of such materials will not violate applicable water quality standards; and
- c. The permittee is not notified by the Secretary to eliminate or reduce the quantity of such materials entering the watercourse.

**8. Navigable Waters**

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

**9. Civil and Criminal Liability**

Except as provided in, "Bypass" (Part II.A., paragraph 5.), "Emergency Action - Electric Power Failures" (Part I, paragraph H.), and "Emergency Pollution Permits" (Part II.A., paragraph 9.), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Civil penalties, as authorized under 10 V.S.A. §1274 and 10 V.S.A. §8010, shall not exceed \$10,000 a day for each day of violation. Criminal penalties, as authorized under 10 V.S.A. §1275, shall not exceed \$25,000 for each day of violation, imprisonment for up to six months, or both.

**10. State Laws**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

**11. Property Rights**

Issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

**12. Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

**13. Authority**

This permit is issued under authority of 10 V.S.A. §1259 which states that: "No person shall discharge any waste, substance, or material into waters of the State, nor shall any person discharge any waste, substance, or material into an injection well or discharge into a publicly owned treatment works any waste which interferes with, passes through without treatment, or is otherwise incompatible with those works or would have a substantial adverse effect on those works or on water quality, without first obtaining a permit for that discharge from the Secretary", and under the authority of Section 402 of the Clean Water Act, as amended.

**14. Definitions**

For purposes of this permit, the following definitions shall apply.

**The Act** - The Vermont Water Pollution Control Act, 10 V.S.A. Chapter 47

**Annual Average** - The highest allowable average of daily discharges calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar year divided by the number of daily discharges measured during that year.

**Average** - The arithmetic means of values taken at the frequency required for each parameter over the specified period.

**The Clean Water Act** - The federal Clean Water Act, as amended.

**Composite Sample** - A sample consisting of a minimum of one grab sample per hour collected during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportionally to flow over that same time period.

**Daily Discharge** - The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

For pollutants with limitations expressed in pounds the daily discharge is calculated as the total pounds of pollutants discharged over the day.

For pollutants with limitations expressed in mg/l the daily discharge is calculated as the average measurement of the pollutant over the day.

**Grab Sample** - An individual sample collected in a period of less than 15 minutes.

**Incompatible Substance (Pollutant)** - Any waste being discharged into the treatment works which interferes with, passes through without treatment, or is otherwise incompatible with said works or would have a substantial adverse effect on these works or on water quality. This includes all pollutants required to be regulated under the Federal Clean Water Act.

**Instantaneous Maximum** - A value not to be exceeded in any grab sample.

**Major Contributing Industry** - One that: (1) has a flow of 50,000 gallons or more per average work day; (2) has a flow greater than five percent of the flow carried by the municipal system receiving the waste; (3) has in its wastes a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Clean Water Act; or (4) has a significant impact, either singly or in combination with other contributing industries, on a publicly owned treatment works or on the quality of effluent from that treatment works.

**Maximum Day** (maximum daily discharge limitation) - The highest allowable "daily discharge" (mg/l, lbs or gallons).

**Mean** - The mean value is the arithmetic mean.

**Monthly Average** - (Average monthly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar month, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar month divided by the number of daily discharges measured during that month.

**NPDES** - The National Pollutant Discharge Elimination System.

**Secretary** - The Secretary of the Agency of Natural Resources

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

**Weekly Average** - (Average weekly discharge limitation) - The highest allowable average of daily discharges (mg/l, lbs or gallons) over a calendar week, calculated as the sum of all daily discharges (mg/l, lbs or gallons) measured during a calendar week divided by the number of daily discharges measured during that week.

## ATTACHMENT A

S/N 003: CSO # 1  
Location: Manhattan Drive/Park Street  
Receiving Water: Wetland contiguous with the Winooski River

S/N 004: CSO #2  
Location: Manhattan Drive/North Champlain Street  
Receiving Water: Wetland contiguous with the Winooski River

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