

January 2, 2008

City of Montpelier
Attn: Todd Law, Director of Public Works
City Hall
39 Main Street
Montpelier, VT 05602

Re: Discharge Permit No. 3-1207 and 1272 Order No 3-1207-A2 - Montpelier WWTF

Dear Mr. Law,

Enclosed is your copy of Discharge Permit No. 3-1207, which has been signed on behalf of the Commissioner of the Department of Environmental Conservation. The permit authorizes the discharge of treated and disinfected municipal wastewater from the Montpelier Wastewater Treatment Facility to the Winooski River.

Please review the permit carefully and make note of the effluent limitations, monitoring requirements, and other special conditions. As proposed in the draft permit, there are several changes included in this permit. Specifically:

1. The annual phosphorus allocation specified in the Lake Champlain Phosphorus TMDL for this discharge has been included into this permit.
2. Annual conventional pollutant monitoring and Whole Effluent Toxicity testing has been included to meet the requirements of 40 CFR 122.21.j.
3. Per the recent changes to 10 VSA Section 1278, Condition I.G requires the preparation and submission of Operation, Management, and Emergency Response Plans. Specifically this condition requires the City to submit an Operation, Management, and Emergency Response Plan for the wastewater treatment facility, pump stations and stream crossing on April 1, 2008 and an Emergency Response Plan of the collection systems by June 30, 2010.
4. In regards to emergency power and/or storage, it will be necessary for the City and the Town to submit an updated emergency power plan within 30 days of the effective date of the permit.
5. Please note the analytical method for E.coli has recently changed and as of the effective date of the permit, the City must be using one of the methods specified in Condition I.F.1.

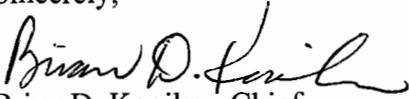


Also enclosed is 1272 Order No. 3-1207-A2, which addresses some of the remaining CSO issues that were identified in the Effectiveness Study and ensures that monitoring and maintenance of the remaining CSOs continues.

With respect to your comment, we have corrected the language in the fact sheet such that it reflects the requirements in the permit for ammonia sampling.

If there are any questions regarding this permit please contact Randy Bean at our office.

Sincerely,



Brian D. Kooiker, Chief
Direct Discharge and O&M Section

attachments

cc w/attachments

Liz Dickson, VT DEC WWMD

Ron Mercier, City of Montpelier WWTF

Tom Nesbitt, Stantec (Montpelier office)

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

Permit No.: 3-1207
File No.: 12-11
PIN: BR81-0002
NPDES No.: VT0100196

Name of Applicant: City of Montpelier
39 Main Street
Montpelier, VT 05602

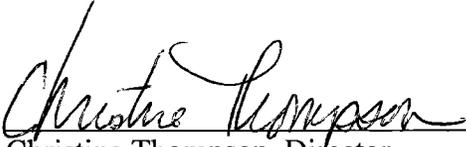
Expiration Date: December 31, 2012

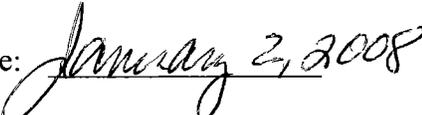
DISCHARGE PERMIT

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 Montpelier, Vermont (hereinafter referred to as the "permittee") is authorized by the Secretary, Agency of Natural Resources, Waterbury, Vermont, to discharge from the Montpelier Wastewater Treatment Facility to the Winooski River in accordance with the following general and special conditions.

This permit shall become effective on the date of signing and shall expire on December 31, 2012.

Laura Q. Pelosi, Commissioner
Department of Environmental Conservation

By: 
Christine Thompson, Director
Wastewater Management Division

Date: 

I. SPECIAL CONDITIONS

A. EFFLUENT LIMITS

1. Until December 31, 2012 the permittee is authorized to discharge from S/N 001 - outfall, the Montpelier Wastewater Treatment Facility, to the Winooski River, an effluent whose characteristics shall not exceed the values listed below:

DISCHARGE LIMITATIONS								
Effluent Characteristic	Annual Limitation	Monthly Average	Weekly Average	Maximum Day	Monthly Average	Weekly Average	Maximum Day	Instantaneous Maximum
	 (lbs / day) Concentration)			
Flow (Annual Avg)	3.97 MGD							
Carbonaceous Biochemical Oxygen Demand, 5-day, 20° C		827	1324		25 mg/l	40 mg/l	45 mg/l	
Total Ammonia Nitrogen				Monitor only			Monitor only	
Total Suspended Solids		933	1490		30 mg/l	45 mg/l	50 mg/l	
Total Phosphorus ^(a)	7,253 total pounds				0.8 mg/l			
Settleable Solids								1.0 ml/l
Escherichia coli Bacteria								77/100 ml
pH					Between 6.5 and 8.5 Standard Units			

- a) Total Annual Pounds of Phosphorus discharge 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.)

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 CBOD₅ and total suspended solids in the discharge shall not exceed 15 percent of the monthly average concentrations of CBOD₅ 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 F.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.
7. The permittee shall maintain processing capacity for use only in receiving and processing septage for the useful life of the facility as required by 10 V.S.A. sections 1626a (a), (c), and (d). "Such septage shall be accepted from any Vermont municipality, and shall not be restricted to specific municipalities. The rate or rates charged for acceptance by plant of septage from sources other than the users for whom the plant is designed to primarily serve, shall be equal to the rate or rates charged the primary users, and shall not subsidize the primary users."
8. The permittee shall clean the quartz sleeves of the ultraviolet light disinfection system at a frequency which assures that effective disinfection is maintained and shall replace the Ultraviolet Light disinfection lamps as necessary to maintain compliance with the E. coli bacteria limitation. The dates and a description of the Ultraviolet Light disinfection system maintenance activities shall be included on the monthly monitoring report.

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 Montpelier Wastewater Treatment Facility in the Winooski downstream 3.5 miles.

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: June 30, 2012

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. WHOLE EFFLUENT TOXICITY TESTING

The permittee shall submit the results of two, two-species (*Pimephales promelas* and *Ceriodaphnia dubia*) acute Whole Effluent Toxicity test conducted on discharge S/N 001 to the Department.

1. A Whole Effluent Toxicity test shall be conducted between August 1 and September 30, 2009 and the results submitted to the Department by December 31, 2009.
2. A Whole Effluent Toxicity test shall be conducted between January 1 and February 28, 2011 and the results submitted to the Department by March 31, 2011.
3. The Whole Effluent Toxicity test shall be conducted in accord with the procedures specified in: Weber, Cornelius I. (editor). "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (Fourth Edition). EPA 600/4-90/027F. August 1993.
4. Based upon the results of these tests or any other Whole Effluent Toxicity tests conducted on this discharge this permit may be amended to include additional Whole Effluent Toxicity testing, establish a Whole Effluent Toxicity limitation, or require that a Toxicity Reduction Evaluation be conducted.

F. 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 one of the following methods:

- a. "Most Probable Number" (MPN) method 9223B found in Standard Methods for the Examination of Water and Wastewater, 18th or subsequent approved edition(s). Premade formulations are available as Colilert and Colilert 18 from

IDEXX Labs Inc., Westbrook, ME;

- b. EPA “membrane filtration” (MF) method 1603 using modified mTEC; or
- c. A single step membrane filtration (MF) method using mColiBlue 24 available from Hach Company, Loveland, CO.

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 Montpelier Wastewater Treatment Facility, according to the following schedule and other provisions: Until December 31, 2012

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous	Daily Total, Max., Min.
CBOD ₅	1 x weekly	24 hour composite ⁽¹⁾
Total Ammonia Nitrogen	1 x monthly	grab ⁽¹⁾
TSS	1 x weekly	24 hour composite
Total Phosphorus	1 x weekly	24 hour composite
Settleable Solids	1 x daily	grab ⁽²⁾
Escherichia coli Bacteria	1 x weekly	grab
pH	1 x daily	grab

- (1) The samples for CBOD₅ and ammonia analysis shall be collected on the same day.
- (2) Settleable Solids samples shall be collected between 10:00 a.m. and 2:00 p.m. or during the period of peak flow.

Annually, by December 31 of each year, the permittee shall also monitor discharge S/N 001 and submit the results, including units of measure, for the following parameters:

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

Grabs samples shall be used for temperature, ammonia, dissolved oxygen, and oil & grease. All other parameters shall be composite samples. Samples shall be representative of seasonal variations 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 CBOD ₅	1 x monthly	8 - hour composite, minimum ⁽¹⁾
Influent TSS	1 x monthly	8 - hour composite, minimum ⁽¹⁾

⁽¹⁾ Composite samples for CBOD₅ 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.

G. OPERATION, MANAGEMENT, AND EMERGENCY RESPONSE PLAN

- 1. **By April 1, 2008**, the permittee shall prepare and submit to the Agency for review and approval an Operation, Management and Emergency Response Plan for the components of the wastewater treatment facility, the sewage pump/ejector stations and stream crossings. The Plan shall include the following:
 - a. the identification of the components at the wastewater treatment facility, the sewage pump/ejector stations, and stream crossings that are determined to be prone to failure based on installation, age, design or other relevant factors.

- b. the identification of the components at the wastewater treatment facility, the sewage pump/ejector stations, and stream crossings which, if one or more failed, would result in a significant release of untreated or partially treated sewage to waters of the State.
- c. an inspection schedule for the components identified in subsection G.1.b. above.
- d. an emergency contingency plan to reduce the volume of a detected sewage release and to mitigate the effect of such a release on public health and the environment.

Upon the Secretary's approval of the inspection schedule as specified in G.1.c. above, the permittee shall implement the Operation, Management, and Emergency Response Plan for the wastewater treatment facility, the sewage pump/ejector stations, and stream crossings.

2. **By July 1, 2010**, the permittee shall prepare and submit to the Agency for review and approval an Operation, Management and Emergency Response Plan for the sewage collection system. The Plan shall include the following:
- a. the identification of the components of the sewage collection system that are determined to be prone to failure based on installation, age, design or other relevant factors.
 - b. the identification of the components which, if one or more failed, would result in a significant release of untreated or partially treated sewage to waters of the State.
 - c. an inspection schedule for the components identified in subsection G.2.b. above.
 - d. an emergency contingency plan to reduce the volume of a detected sewage release and to mitigate the effect of such a release on public health and the environment.

Upon the Secretary's approval of the inspection schedule as specified in G.2.c. above, the permittee shall implement the Operation, Management, and Emergency Response Plan for the sewage collection system.

H. COMBINED SEWER OVERFLOWS

The 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 and the permittee complies with the terms and conditions of 1272 Order No. 3-1207-A2.

I. 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.

J. 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 in the case of ultraviolet light disinfection systems, not less than secondary treatment) 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.

K. 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 $\pm 10\%$.

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.

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 request for transfer application must include as a minimum:

- a. A properly completed application form provided by the Secretary and the applicable processing fee.
- b. A written statement from the prospective owner or operator certifying:
 - i. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership.
 - ii. 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.
 - iii. 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.
- c. The date of the sale or transfer.

The Secretary 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 G.), 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

Serial Number S/N 002: Combined Sewer Overflow # 001
Location: Taylor Street bridge abutment
Receiving Water: Winooski River

Serial Number S/N 004: Combined Sewer Overflow # 003
Location: Bailey Avenue
Receiving Water: Winooski River

Serial Number S/N 007: Combined Sewer Overflow # 007
Location: near Railroad Bridge
Receiving Water: North Branch River

Serial Number S/N 008: Combined Sewer Overflow # 008
Location: 100 feet south of CSO #007
Receiving Water: North Branch River

Serial Number S/N 009: Combined Sewer Overflow # 009
Location: Main Street near Baird Street
Receiving Water: North Branch River

Serial Number S/N 011: Combined Sewer Overflow # 013
Location: Winter and Elm Streets
Receiving Water: North Branch River

Serial Number S/N 014: Combined Sewer Overflow # 023
Location: Bailey Avenue Bridge
Receiving Water: Winooski River

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

FACT SHEET
November 2007

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

FILE NO.: 12-11
PROJECT ID NO.: BR81-0002
PERMIT NO.: 3-1207
NPDES NO.: VT0100196

NAME AND ADDRESS OF APPLICANT:

City of Montpelier
39 Main Street
Montpelier, VT 05602

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Montpelier Wastewater Treatment Facility
949 Dog River Road
Montpelier, Vermont

RECEIVING WATER AND CLASSIFICATION: Winooski River: Class B with a waste management zone. Class B waters are suitable for bathing and recreation; irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable of public water supply with filtration and disinfection. A waste management zone is a specific reach of Class B waters designated by a permit to accept the discharge of properly treated wastes that prior to treatment contained organisms pathogenic to human beings.

I. Proposed Action, Type of Facility, and Discharge Location

The above named applicant has applied to the Vermont Department of Environmental Conservation for renewal of a permit to discharge into the designated receiving water. The facility is engaged in the treatment of domestic and industrial wastewater from the City of Montpelier and a portion of the Town of Berlin. The discharge is from the Montpelier Wastewater Treatment Facility to the Winooski River.

II. Description of Discharge

This permit authorizes the discharge of 3.97 MGD of treated municipal wastewater. The treatment system is considered secondary treatment and consists of the following processes: an activated sludge process for secondary treatment and nitrification, chemical precipitation for phosphorus removal, and ultraviolet light for disinfection.

A quantitative description of the discharge in terms of significant effluent parameters is presented in section IV. below.

III. Limitations and Conditions

The effluent limitations of the permit, the monitoring requirements, and any implementation schedule (if required), may be found on the following pages of the permit:

Effluent Limitations: Page 2
 Monitoring Requirements: Pages 5, 6, and 7

IV. Permit Basis and Explanation of Effluent Limitation Derivation

History & Summary

On June 27, 2007 the City submitted an application for renewal of their discharge permit for the Montpelier WWTF. Having completed its review of the application, the Department has made a determination to renew the discharge permit for the wastewater treatment facility's discharge. Following is a discussion of the specific factors considered in the renewal of this permit.

The WWTF provides wastewater treatment capacity for residential, commercial, and industrial properties in the City of Montpelier and within the sewer service area in the Town of Berlin.

Effluent Limitations

Flow

This permit includes a flow limitation of 3.97 MGD, annual average, based on the design capacity of the facility. This is unchanged from the previous permit. Flow monitoring is required daily. This facility maintains a constant discharge.

Phosphorus

This draft discharge permit for the Montpelier WWTF contains a phosphorus effluent concentration limit of 0.8 mg/l, monthly average, and a mass effluent limit of 7,253 total pounds, annual limitation.

The concentration effluent limitation is based on the requirements of 10 V.S.A. 1266a and is unchanged from the previous permit. The mass annual effluent limitation is based on the Lake Champlain Phosphorus TMDL, effective November 4, 2002. The TMDL allocated 3,290 metric tons per year or 7,253 pounds per year to the Montpelier WWTF and this allocation is being incorporated into the draft permit. This annual pounds limit replaces the 26.5 lbs/day, monthly average, mass effluent limitation specified in the previous permit.

The "annual total pounds" is the total of the twelve monthly totals which are calculated by multiplying the total monthly flow x the monthly average phosphorus concentration x 8.34. The annual total must be submitted with the December monthly monitoring report.

This permit requires weekly monitoring of effluent composite samples for total phosphorus. This requirement is unchanged from the previous permit.

Carbonaceous Biochemical Oxygen Demand (CBOD₅)

As part of the renewal application, the City requested changing the BOD₅ effluent limitations which were based on 40 CFR Part 133.102.a.1 and 2 to the CBOD₅ limitations specified in 40 CFR Part 133.102.a.4.

CBOD₅ or Carbonaceous BOD₅ represents the Biological Oxygen Demand (BOD) from organic compounds and oxidation of inorganic compounds. Any BOD from nitrifying organisms, which consume oxygen in the nitrification process of converting ammonia to nitrate, is removed by adding

a nitrification inhibitor. Based on a review of the data collected on the CBOD₅ and BOD₅ concentrations in this discharge and considering the WWTF goes in and out of the nitrification process in the spring and fall and that chlorine based disinfection system has been replaced with an ultraviolet light system, the Agency agrees that a CBOD₅ limitation is warranted.

The CBOD₅ mass limitations are 827 lbs/day, monthly average, and 1324 lbs/day, weekly average. The CBOD₅ effluent concentration limits are 25 mg/l, monthly average, and 40 mg/l, weekly average. These limitations are set in accordance with the limitations specified for secondary treatment in 40 CFR Part 133.102.a.4.

These CBOD₅ limitations replace BOD₅ limitations of 933 lbs/day, monthly average, and 1490 lbs/day, weekly average, mass limitations and the 30 mg/l, monthly average, and 45 mg/l, weekly average, concentration limitations in the previous permit.

In addition, the permit contains a 45 mg/l, maximum day, CBOD₅. This is a limitation which the Agency implements to supplement the federal technology based limitations to prevent a gross one-day permit effluent violation to be offset by multiple weekly and monthly sampling events which would enable a discharger to comply with the weekly average and monthly average permit limitations.

The sampling frequency for CBOD₅ is once per week and is unchanged from the BOD₅ sampling frequency specified in the previous permit.

Total Suspended Solids (TSS)

The TSS mass limitations are 933 lbs/day, monthly average, and 1490 lbs/day, weekly average, and are unchanged from the previous permit. The TSS effluent concentration limits are 30 mg/l, monthly average, and 45 mg/l, weekly average. These limitations are set in accordance with the limitations specified for secondary treatment in 40 CFR Part 133.102.

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

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

Escherichia coli bacteria

The *E. coli* limitation is 77 colonies /100ml, instantaneous maximum and is based on Section 3-04.B.3 of the Vermont Water Quality Standards. This limitation is unchanged from the previous permit. Sampling is required once per week and is unchanged from the previous permit.

Settleable Solids

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

Ammonia

Based on the US EPA 1999 Update of Ambient Water Quality Criteria for Ammonia, this discharge does not have a reasonable potential to cause ammonia toxicity in the Winooski River. However, this WWTF often receives and treats more than 20,000 gallons per day of landfill leachate and the Total Kjeldahl Nitrogen (TKN) concentration of the leachate is often greater than 500 mg/l. Further nitrogen analysis of the leachate indicates that the majority of the TKN consists of ammonia. Therefore to ensure that this leachate does not cause operational problems at the WWTF, a “monitor only” require for ammonia has been included in the draft permit. Ammonia monitoring is required once per month and must be sampled on the same day as CBOD₅

Waste Management Zone

The previous permit established a waste management zone beginning at the outfall of the Montpelier WWTF and extending downstream in the Winooski River for 3.5 miles. The draft permit will maintain this waste management zone.

Toxicity Testing and Additional Pollutant Testing

Previous Whole Effluent Toxicity (WET) tests conducted on this discharge, have indicated that this discharge does not have a reasonable potential to cause an instream toxic impact.

However to ensure that this discharge does not develop the potential to cause toxicity, a requirement (Condition I.E) to conduct WET testing has been included in the draft permit. This Condition requires a two species acute WET test to be done in 2009 and 2011.

In addition, per the requirements of 40 CFR 122.21.j, annual monitoring for temperature, Dissolved Oxygen, Oil & Grease, Nitrate/Nitrite, Total Dissolved Solids, and Total Kjeldahl Nitrogen, has been included in the draft permit.

Operation, Management, and Emergency Response Plan

Per the requirements of the revisions to 10 V.S.A. Sections 1263 and 1278, promulgated in the 2006 legislative session, Condition I.G. has been included in the draft permit. These statutory modifications required that each municipality develop an Operation, Management and Emergency Response Plan to prevent and mitigate any accidental releases of sewage.

Condition I.G requires the preparation and submission of the Operation, Management and Emergency Response Plan in two parts. First, an Operation, Management and Emergency Response Plan should be developed for the components at the wastewater treatment facility, the components at the pump/ejector stations, and stream crossings. Second, an Operation, Management and Emergency Response Plan should be developed for the sewage collection system.

The field work necessary for preparing an Operation, Management and Emergency Response Plan for the components at the wastewater treatment facility, the components at the pump/ejector stations, and stream crossings is not extremely time consuming. Therefore, the draft permit requires submittal of an Operation, Management and Emergency Response Plan for the components at the wastewater treatment facility, the components at the pump/ejector stations, and stream crossings by April 1, 2008.

The field work necessary for preparing an Operation, Management and Emergency Response Plan for the sewage collection can be extremely time-consuming and complex. Therefore, the draft permit requires submittal of an Operation, Management and Emergency Response Plan for the

sewage collection system by July 1, 2010.

Combined Sewer Overflows

In 2006, the City completed the final work on a combined sewer overflow elimination project. The project began in 1992 and was done in two major construction phases, with Phase II being completed in 2004. In 2005, the City conducted an effectiveness study to determine if the project, as completed, met the requirements of the Vermont Combined Sewer Overflow Policy. The effectiveness study concluded that there were still areas where significant sources of stormwater entered the sewer collection system and the main 36" trunk line to the wastewater treatment facility had an accumulation of up to 18" of sediment which severely restricted its ability to convey wastewater. Consequently the Agency required the City to clean the trunk line and conduct an additional effectiveness study. During the summer of 2006 the City cleaned the trunk line. The City also discovered an old granite box culvert which was conveying a significant volume of groundwater and runoff from a pond into the sewer collection system in the subcatchment for CSO 009. The City completed cleaning of the trunk line on October 23, 2006 and eliminated the stone box culvert on November 9, 2006.

Currently seven overflows remain in the system, CSO 001, 003, 007, 008, 009, 013 and 023. The City anticipates being able to eliminate CSO 009 and 013, as soon as follow-up monitoring confirms that the sources to these overflows have been eliminated. The remaining overflows will need to remain to protect property from sewage backups should an episodic storm occur. Consequently the Agency is issuing 1272 Order which requires the City to eliminate CSO 009 and 013, clean the outfall of CSO 001, monitor the remaining overflows and to implement the "Nine Minimum Controls for Combined Sewer Collection Systems".

VI. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from November 26, 2007 through December 27, 2007 during which time interested persons may submit their written views on the draft permit. All written comments will be retained by the Department and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Department.

Written comments should be sent to:

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

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

Any interested person or groups of persons may request or petition for a public hearing with respect to this draft permit. Any such request or petition for a public hearing shall be filed within the public comment period described above and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted.

The Department will hold a hearing if there is significant public interest in holding such a hearing. Any public hearing brought in response to such a request or petition will be held in the geographical

area of the draft discharge or other appropriate area, at the discretion of the Department and may, as appropriate, consider related groups of draft permits. Any person may submit oral or written statements and data concerning the draft permit at the public hearing. The Department may establish reasonable limits on the time allowed for oral statements and may require the submission of statements in writing. All statements, comments, and data presented at the public hearing will be retained by the Department and considered in the formulation of the final determination to issue, deny, or modify the draft permit.

The complete application, draft permit, and other information are on file and may be inspected at the VTDEC, Wastewater Management Division, Waterbury Office. Copies will be made at a cost based on the previous Secretary of State Official Fee Schedule for Copying Public Records from 8:00 am to 4:30 pm, Monday through Friday.

The draft permit and this fact sheet may also be viewed on the Wastewater Management Division's web site at www.anr.state.vt.us/dec/ww/wwmd.cfm.

AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1272 ORDER No. 3-1207A-2

In The Matter of:

City of Montpelier
City Hall
39 Main Street
Montpelier, Vermont 05602

In accordance with the provisions of 10 V.S.A. Section 1272, the Secretary ("Secretary") of the Agency of Natural Resources ("Agency") makes the following:

FINDINGS OF FACT

- A. The City of Montpelier ("Montpelier") owns and operates a combined sewage collection system which collects both sanitary sewage and stormwater runoff.
- B. During storm events, overflows containing untreated or partially treated sanitary sewage can discharge to the Winooski River and North Branch River at several locations within the sewer system (see Attachment A.). These discharges often constitute public health and environmental hazards. Based on current records, these overflows occur during certain storm events but do not occur during dry weather conditions.
- C. The discharge from the combined sewer overflows containing untreated sanitary sewage is in violation of the Vermont Water Quality Standards, Section 3-04(B)(3), and Discharge Permit No. 3-1207.
- D. A preliminary engineering assessment, conducted for Montpelier by Dufresne-Henry, Inc. and submitted to the Agency on December 31, 1992, determined that the optimum alternative for elimination of the combined sewer overflow discharges is separation of the stormwater and sanitary collection systems.
- E. An amendment to the preliminary engineering assessment was submitted to the Agency on December 15, 1993, and identified a two phased separation of the stormwater and sanitary collection systems as the most feasible method of eliminating the combined sewer overflow discharges.

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- F. Montpelier completed Phase I of the combined sewer overflow elimination project in 1998.
- G. Montpelier completed Phase II of the combined sewer overflow elimination project in August 2004.
- H. During the summer and fall of 2004 and the spring of 2005, Montpelier conducted an "Effectiveness Study" to verify that the combined sewer overflow elimination project had resulted in compliance with the Vermont Combined Sewer Overflow Policy, June 1990.
- I. The Effectiveness Study indicated that CSO 002, CSO 017, and CSO 024 were no longer active and could be eliminated.
- J. The Effectiveness Study also indicated that the combined sewer overflow elimination project had not resulted in compliance with the Vermont Combined Sewer Overflow Control Policy, June 1990.
- K. The Effectiveness Study indicated that CSO 001, CSO 003, CSO 007, CSO 008, and CSO 023 are still actively discharging during smaller storm events than is specified in the Vermont Combined Sewer Overflow Control Policy, June 1990.
- L. Further investigations into the possible causes of these overflow events revealed that the 36" trunk sewer line from the siphon structure located in CSO 023 near the Bailey Avenue bridge to the wastewater treatment facility was partially filled with accumulated sand and sediment deposits. Also the section of the trunk line from the Bailey Avenue bridge to the "North Branch" river crossing had substantial amounts of accumulated sand and sediment deposits. This accumulated material restricted the flow in the sewer line and created or contributed to overflow events occurring at CSO 001, CSO 003, CSO 007, CSO 008, and CSO 023.
- M. Montpelier conducted a phased cleaning of the trunk sewer line. Montpelier cleaned the section from the Bailey Avenue bridge to the Montpelier wastewater treatment facility in the summer of 2005 and the section from the Bailey Avenue bridge to the "North Branch" river crossing during the summer of 2006. In addition, Montpelier physically eliminated CSOs 002, 0017, and 024.
- N. During the summer of 2006 Montpelier also discovered an old stone box culvert which was conveying a significant volume of groundwater and runoff from a pond into the sewer collection system in the subcatchment for CSO 009. The City eliminated the old stone box culvert on November 9, 2006.
- O. Based upon limited monitoring after the completion of the trunk line cleaning and elimination of the old stone box culvert from the collection system, it is highly probable that CSO 009 and CSO 013 can be physically eliminated from the

1272 Order No. 3-1207A-2

collection system. Additionally the storm drain outfall of CSO 001 from the overflow structure to the river was full of sediment and needed cleaning to prevent the backup of stormwater into the sanitary sewer collection system.

- P. In order to protect the sewer siphons and pumps stations in the collection system and private property in Montpelier, the overflow structures for CSOs 001, 003, 007, 008, and 023 will need to be maintained.

In accordance with the provisions of 10 V.S.A. Section 1272, the Secretary, based on the findings of fact, hereby issues the following:

ORDER

1. **By no later than December 31, 2008**, Montpelier shall physically eliminate (plug) CSO 009 and CSO 013 and clean the storm drain outfall of CSO 001. Written verification of the completion of the elimination of these overflows and cleaning of the storm drain outfall shall be submitted to the Agency within 10 days after completion of the work.
2. **By no later than June 30, 2008**, Montpelier shall submit a progress report to the Agency detailing the status of eliminating CSO 009 and CSO 013 and cleaning of the storm drain outfall of CSO 001. As a minimum, the progress report shall contain the following:
 - a. A description of the progress made toward achieving the compliance date for completion of the elimination of CSO 009 and 013 and cleaning of the storm drain outfall of CSO 001, including a summary of the work done.
 - b. An assessment whether Montpelier is on schedule in its efforts to meet the compliance date for completion of the elimination of CSO 009 and 013 and cleaning of the storm drain outfall of CSO 001.
 - c. If Montpelier is not on schedule to meet the compliance date for completion of the elimination of CSO 009 and 013 and to clean the storm drain outfall of CSO 001, a detailed description of the steps Montpelier intends to take to meet this date.
3. Montpelier shall implement "Best Management Practices" (BMPs) for a combined collection system and meet, at a minimum, the controls specified below:
 - a. litter control and street sweeping;

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- b. routine catch-basin, sewer and interceptor cleaning;
 - c. in-line grit removal;
 - d. maximizing wet-weather flow to the wastewater treatment facility; and
 - e. implementation of a public notification process to ensure that the public receives adequate notification of when and where CSOs occur.
4. Montpelier shall monitor CSO 001, 003, 007, 008, 023 and annually submit a report to the Agency detailing the monitoring results. The report shall be prepared by a Professional Engineer registered in Vermont confirming the elimination of the combined sewer overflow discharges. This report shall include as a minimum:
 - a. the results of field inspection and monitoring conducted during the period of April 1 through October 31 or when otherwise feasible based on weather conditions.
 - b. the correlation of base flow to the wastewater treatment facility, precipitation events, and overflow frequency.
 - c. an estimate of the frequency and volume of any discharges occurring from the remaining combined sewer overflow discharge structures.
 - d. a determination if the remaining combined sewer overflow structures within the collection system comply with the Vermont Combined Sewer Overflow Control Policy, June 1990 or the most current amendment of this policy.
5. Subsequent to the Agency's review of the reports required in Condition 4 above, the Agency may provide specific comments and recommendations for additional combined sewer elimination work. At that time, this Order shall be amended to include a schedule for financing, submission of final engineering plans, and annual construction activities for completion of any additional combined sewer overflow correction work.
6. All reports referenced in Condition 1, 2, and 4 above shall be submitted to:

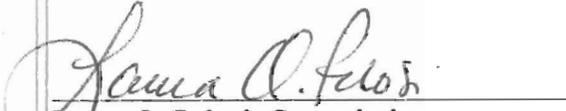
Agency of Natural Resources
Wastewater Management Division
Sewage Building, 103 South Main Street
Waterbury, VT 05671-0405
7. The State of Vermont and the Agency of Natural Resources reserve continuing jurisdiction to ensure future compliance with all statutes, rules, and regulations applicable to the facts and violations set forth above.
8. Nothing in this Order shall be construed as having relieved, modified, or in any manner affected Montpelier's on-going obligation to comply with all other federal, state, or local statutes applicable to Montpelier nor does it relieve Montpelier of the

1272 Order No. 3-1207A-2

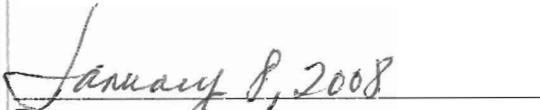
obligation to obtain all necessary federal, state, and local permits.

- 9 This Order is not a resolution of any enforcement action that may be pending, contemplated, or initiated in these matters.
10. Pursuant to 10 V.S.A. Chapter 220, any appeal of this Order must be filed with the clerk of the Environmental Court with 30 days of the date of this Order. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at www.vermontjudiciary.org. The address of the Environmental Court is 225 North Main Street, suite 1, Barre, VT 05641 (Tel # 802-479-4487).
11. This Order shall be effective upon the date of signing and shall remain in effect until December 31, 2012 or until such time the Agency rescinds this Order or issues a subsequent Order, which ever occurs first.

Agency of Natural Resources
Wastewater Management Division
Sewing Building, 103 South Main Street
Waterbury, VT 05761-0405



Laura Q. Pelosi, Commissioner
Department of Environmental Conservation



Date

1272 Order No. 3-1207A-2

Attachment A

Serial Number S/N 002: Combined Sewer Overflow # 001
Location : Taylor Street bridge abutment
Receiving Water : Winooski River

Serial Number S/N 004: Combined Sewer Overflow # 003
Location : Bailey Avenue
Receiving Water : Winooski River

Serial Number S/N 007: Combined Sewer Overflow # 007
Location : near Railroad Bridge
Receiving Water : North Branch River

Serial Number S/N 008: Combined Sewer Overflow # 008
Location : 100 feet south of CSO #007
Receiving Water : North Branch River

Serial Number S/N 009: Combined Sewer Overflow # 009
Location : Main Street near Baird Street
Receiving Water : North Branch River

Serial Number S/N 011: Combined Sewer Overflow # 013
Location : Winter and Elm Streets
Receiving Water : North Branch River

Serial Number S/N 014: Combined Sewer Overflow # 023
Location : Bailey Avenue Bridge
Receiving Water : Winooski River