



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 St. - Sewing Bldg.
Waterbury VT 05671-0405
Telephone: (802) 241-3822
FAX: (802) 241-2596

October 1, 2008

Dominic Cloud
City of St. Albans
PO Box 867
St. Albans, VT 05478

Re: Discharge Permit No. 1279 – St. Albans Wastewater Treatment Facility, Fact Sheet, and Response Summary

Dear Mr. Cloud,

Enclosed is your copy of Discharge Permit No. 3-1279, which has been signed on behalf of the Commissioner of the Department of Environmental Conservation. This permit authorizes the discharge of treated wastewater from the City's wastewater treatment facility to wetlands contiguous with Lake Champlain.

Please review the permit carefully and make note of the effluent limitations, monitoring requirements, and other special conditions facility. There are several changes in this permit from the draft that was placed on public notice in September 2007. Specifically:

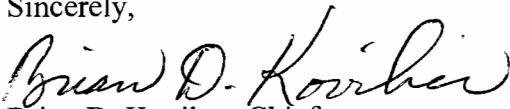
1. Based on our investigation conducted last summer it was determined that the receiving water at the outfall is constantly under this influence of Lake Champlain. Therefore the receiving water has been changed from Stevens Brook to wetlands contiguous with Lake Champlain.
2. As previously discussed with Commissioner Pelosi, the monthly average phosphorus concentration limitation of 0.5 mg/l for this discharge has been reinstated in this permit.
3. Condition I.G has been modified to reflect recent events and now requires the City to implement the Operation, Management, and Emergency Response Plan for the components of the wastewater treatment facility, pump stations, and stream crossings that was approved by the Agency in August 2008 and submitted a plan for the collection system by submitted by July 1, 2010.
4. Ammonia monitoring has been included in this permit in order to provided data to assess any potential impacts of the ammonia in this discharge on Stevens Brook.
5. Due to the delay in processing this permit, Condition I.H. has been modified to require the submittal of the Engineering Evaluation and Report by December 31, 2012.

6. Condition I.I. has been added which addresses the Welden Street CSO and requires the City to implement the "Nine Minimum Controls" for this overflow. These provisions were previously included in the recently issued 1272 Order regarding the CSO.

Also included is a Response Summary which addresses the comments that were submitted on the draft permits.

If you have any questions regarding this permit, please contact our office.

Sincerely,



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

attachments

cc. w/attachments

Suzanne Pickett, VT DEC WWMD

Brian Willett, City of St. Albans

Wayne Elliot, FA&A

Anthony Iarrapino, Conservation Law Foundation

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

Permit No.: 3-1279
File No.: 06-13
PIN: EJ95-0314
NPDES No.: VT0100323

Name of Applicant: City of St. Albans
PO Box 867
St. Albans, VT 05478

Expiration Date: September 30, 2013

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

This permit shall become effective on the date signing and shall expire on September 30, 2013.

Laura Q. Pelosi, Commissioner
Department of Environmental Conservation

By: Christine Thompson Date: Oct. 3, 2008
Christine Thompson, Director
Wastewater Management Division

I. SPECIAL CONDITIONS

A. EFFLUENT LIMITS

1. From the date of signing through September 30, 2013, for the period of **October 1 through May 31**, the permittee is authorized to discharge from S/N 001 - outfall, the St. Albans Wastewater Treatment Facility, to wetlands contiguous with Lake Champlain, an effluent whose characteristics shall not exceed the values listed below:

DISCHARGE LIMITATIONS									
Effluent Characteristic	Annual Limitation	Monthly Average	Weekly Average	Maximum Day	Annual Average	Monthly Average	Weekly Average	Maximum Day	Instantaneous Maximum
		 (lbs / day) (Concentration)		
Flow (Annual Avg)	4.0 mgd								
Biochemical Oxygen Demand, 5-day, 20° C		1001	1501			30 mg/l	45 mg/l	50 mg/l	
Total Suspended Solids		1001	1501			30 mg/l	45 mg/l	50 mg/l	
Total Phosphorus ^(a)	6089 pounds					0.5 mg/l			
Settleable Solids									1.0 ml/l
Total Residual Chlorine (TRC)									0.1 mg/l
Escherichia coli Bacteria									77/100 ml
pH						Between 6.5 and 8.5 Standard Units			
TRC prior to dechlorination ^(b)									Monitor only
Total ammonia Nitrogen				Monitor only				Monitor only	
Whole Effluent Toxicity A-NOEC ^(c)									100%

- 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.)
- b) The TRC prior to dechlorination shall be maintained at a concentration to ensure that an Escherichia coli concentration of less than 77/100 ml is maintained at all times.
- c) A-NOEC is the concentration of the effluent in a sample that causes No Observed (Acute) Effect.

A. EFFLUENT LIMITS

2. From the date of signing through September 30, 2013, for the period of **June 1 through September 30**, the permittee is authorized to discharge from S/N 001 - outfall, the St. Albans Wastewater Treatment Facility, to wetlands contiguous with Lake Champlain, an effluent whose characteristics shall not exceed the values listed below:

DISCHARGE LIMITATIONS									
Effluent Characteristic	Annual Limitation	Monthly Average	Weekly Average	Maximum Day	Annual Average	Monthly Average	Weekly Average	Maximum Day	Instantaneous Maximum
	 (lbs / day)			 (Concentration)		
Flow (Annual Avg)	4.0 mgd								
Biochemical Oxygen Demand, 5-day, 20° C ^(a)		334				10 mg/l			
Total Suspended Solids ^(a)		334				10 mg/l			
Total Kjeldahl Nitrogen ^(a)		334				10 mg/l			
Total Phosphorus ^(b)	6089 pounds					0.5 mg/l			
Settleable Solids									1.0 ml/l
Total Residual Chlorine (TRC)									0.1 mg/l
Escherichia coli Bacteria									77/100 ml
pH						Between 6.5 and 8.5 Standard Units			
TRC prior to dechlorination ^(c)									Monitor only
Total Ammonia Nitrogen				Monitor only				Monitor only	
Whole Effluent Toxicity A-NOEC ^(d)									100%

- a) During events in which the influent flow exceeds 8.0 mgd, the effluent shall comply with the limitations specified in Section I.A.1 of this permit.
- b) 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.)
- c) The TRC prior to dechlorination shall be maintained at a concentration to ensure that an Escherichia coli concentration of less than 77/100 ml is maintained at all times.
- d) A-NOEC is the concentration of the effluent in a sample that causes No Observed (Acute) Effect.

3. 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.
4. The discharge shall not cause visible discoloration of the receiving waters.
5. The monthly average concentrations of BOD₅ and total suspended solids in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD₅ 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.
6. 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.
7. 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.
8. The permittee shall not discharge septage into the treatment process when the wastewater influent flow exceeds 8.0 mgd and results in an overflow of the primary clarifiers.
9. The permittee shall convey all wastewater flows up to 8.0 mgd through the secondary and tertiary units.
10. During storm events which result in an overflow from the primary clarifiers, the permittee shall sample S/N 001 at a representative location after the treated effluent and the primary treated disinfected overflow have combined.
 - a. In addition to the sampling frequencies specified in Condition I.F.2. below, the permittee shall sample the combined discharge during a minimum of twelve overflow events per year.
 - b. Samples shall be analyzed for the parameters and comply with the limitation specified in Condition I.A.1 above, except Whole Effluent Toxicity. The results shall be highlighted on the monthly discharge monitoring report and incorporated into the monitoring results.
 - c. Grab samples shall be representative of the combined discharge during an overflow event to the extent practicable.

11. The permittee shall maintain the capability to chlorinate the tertiary effluent immediately following the sand filters, chlorinate the combined discharge at the overflow structure and dechlorinate at the Brigham Road manhole.

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 St. Albans Wastewater Treatment in the Lake Champlain/Stevens Brook wetland complex to the Route 36 bridge (approximately 1 mile).

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: March 31, 2013.

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

Annually, the permittee shall submit the results of one two-species (Pimpephales promelas and Ceriodaphnia dubia) acute Whole Effluent Toxicity test conducted on discharge S/N 001 to the Department. Based upon the results of this test or any other Whole Effluent Toxicity tests conducted on this discharge this permit may be amended to include additional Whole Effluent Toxicity testing or require that a Toxicity Reduction Evaluation be conducted.

1. The Whole Effluent Toxicity test shall be conducted between August 1 and September 30 and the results submitted to the Department by December 31.
2. 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.

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 St. Albans Wastewater Treatment Facility, according to the following schedule and other provisions until September 30, 2013:

PARAMETER	MINIMUM FREQUENCY OF ANALYSIS	SAMPLE TYPE
Flow	Continuous	Daily Total, Max., Min.
BOD ₅	1 x weekly	24 hour composite ⁽¹⁾
TSS	1 x weekly	24 hour composite ⁽¹⁾
Total Phosphorus	1 x weekly	24 hour composite ⁽¹⁾
Total Kjeldahl Nitrogen	1 x weekly	24 hour composite ^(1,2)
Settleable Solids	1 x daily	Grab ⁽³⁾
Escherichia coli Bacteria	1 x weekly	Grab ^(4,5)
Total Residual Chlorine	1 x daily	Grab ^(4,5)
Total Residual Chlorine prior to dechlorination	1 x daily	Grab ⁽⁶⁾
Total ammonia Nitrogen	1 x monthly	Grab
pH	1 x daily	Grab
Whole Effluent Toxicity	1 x annually	Composite ⁽⁷⁾

⁽¹⁾ Composite samples for BOD₅, TSS, Total Phosphorus and TKN (when applicable) shall be collected immediately after the sand filter; except when sampling a combined discharge event.

⁽²⁾ TKN monitoring is only required from June 1 through September 30.

⁽³⁾ Settleable Solids samples shall be collected between 10:00 a.m. and 2:00 p.m. or during the period of peak flow.

⁽⁴⁾ On the day that the Escherichia coli grab sample is collected, the daily total residual chlorine grab sample for that day shall be collected at the same time and location as the E. coli sample. Samples shall be collected between the hours of 6:00 a.m. to 6:00 p.m.

⁽⁵⁾ Effluent samples for total residual chlorine and Escherichia coli shall be collected after dechlorination and prior to discharge.

⁽⁶⁾ Samples for total residual chlorine prior to dechlorination shall be collected at a convenient location prior to dechlorination.

⁽⁷⁾ Refer to Condition I.E. above.

In addition to the parameters specified above, annually by December 31, the permittee shall 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 Dissolved Solids	

Grab samples shall be used for temperature, ammonia, dissolved oxygen, and oil & grease. All other parameters shall be composite samples. Samples shall be representative of 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 BOD ₅	1 x monthly	8 - hour composite, minimum ⁽¹⁾
Influent TSS	1 x monthly	8 - hour composite, minimum ⁽¹⁾
Septage	Daily	Total volume received

⁽¹⁾ Composite samples for BOD₅ 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 forms WR-43 and WR-43-PO4. 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 PLANS

1. The permittee shall implement the Operation, Management and Emergency Response Plan for the wastewater treatment facility, sewage pump/ejector stations, and stream crossings approved by the Agency on **August 13, 2008**.
2. **By no later than July 1, 2010**, the permittee shall prepare, implement, and submit to the Agency for review and approval, an Operation, Management and Emergency Response Plan for the sewage collection system.
3. The Plan shall include the following:
 - a. the identification of the components that are determined to be prone to failure based on installation, age, design or other relevant factors and which, if one or more failed, would result in a significant release of untreated or partially treated sewage to waters of the State.
 - b. an inspection schedule for the components identified in subsection G.3.a. above.
 - c. an emergency contingency plan to reduce the volume of a deterred sewage release and to mitigate the effect of such a release on public health and the environment.

Upon the Secretary's approval of the schedule as specified in G.3.b above, the permittee shall implement that element of the Operation, Management, and Emergency Response Plan.

H. ENGINEERING EVALUATION AND REPORT

By December 31, 2012, the permittee shall conduct an in-depth engineering inspection and evaluation of the wastewater treatment facility and shall submit a written report of the results to the Agency. The engineering inspection and report shall be conducted and prepared in accord with the following conditions:

A professional engineer with experience in the design and operation of municipal wastewater treatment facilities shall be hired to perform an in-depth inspection of the wastewater treatment facility, pump stations, collection system, and manholes. At the treatment facility, all components which are critical to the treatment process or which could adversely affect effluent quality in the event of their failure shall be inspected. Such components shall include (but are not limited to): grit removal systems, comminutors, tank and partition integrity, biological systems, aeration systems, piping, clarifier drives and chlorination and dechlorination systems, flow metering systems, any critical and necessary valves, sludge handling equipment (digesters and appurtenances), etc. In the pump stations, all components critical to the proper conveyance of sewage, the prevention of sewage bypass, and the supporting appurtenances shall be inspected. This includes pumps, alarms, checkvalves, piping, motor controls, ventilators, dehumidifiers and sumps pumps, if so equipped, and the station structure.

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

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

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

I. COMBINED SEWER OVERFLOWS

The discharge from the combined sewer overflow, listed on Attachment A of this permit, is authorized by this permit during storm events only, provided the discharges do not violate Water Quality Standards, contain no septage or holding tank waste, and provided the permittee implements the following controls to reduce the combined sewer overflow discharge and its effects on the quality of the receiving water:

- a. implementation of proper operation and regular maintenance programs for the sewer system and the combined sewer overflow such as routine catch-basin, sewer, and interceptor cleaning;
- b. maximizing the use of the collection system for storage;
- c. maximizing wet-weather flow to the wastewater treatment facility;
- d. elimination of any discharge from combined sewer overflow during dry weather;
- e. control of solid and floatable material in the combined sewer overflow;
- f. pollution prevention programs such as litter control and street sweeping to reduce the contaminants in the combined sewer overflow discharge;
- g. implementation of a public notification process to ensure that the public receives adequate notification of when and where a combined sewer overflow discharge occurs;
- h. monitoring to characterize the impacts of the combined sewer overflow discharge and to determine the effectiveness of these controls

J. 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.

K. 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.

L. 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 willful 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 K.), 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:	Weldon Street
Receiving Water:	Stevens Brook

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

FACT SHEET
October 2008

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

PROJECT ID NO.: EJ95-0314

PERMIT NO.: 3-1279

NAME AND ADDRESS OF APPLICANT:

City of St. Albans
PO Box 867
St. Albans, VT 05478

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

St. Albans Wastewater Treatment Facility
Rewes Drive
St. Albans, Vermont

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

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

The above named applicant has applied to the Vermont Department of Environmental Conservation for renewal of its permit to discharge into the designated receiving water. The facility is engaged in the treatment of domestic wastewater from the City of St. Albans and the Town of St. Albans. The discharge is from the St. Albans Wastewater Treatment Facility outfall to the Stevens Brook wetlands contiguous with Lake Champlain.

II. Description of Discharge

This permit authorizes the discharge of 4.0 MGD of treated and disinfected municipal wastewater. The wastewater treatment facility receives wastewater from the City of St. Albans and the Town of St. Albans. The treatment system is considered advanced treatment of wastewater. The influent first enters primary clarifiers, then it is pumped to a trickling filter for preliminary biological treatment, the wastewater then passes through rotating biological contactors (RBCs), then into flocculation tanks where alum and polymer are added for phosphorus removal. The wastewater then flows to secondary clarifiers, then through a sand filter for effluent polishing. Disinfection is achieved by chlorination followed by dechlorination prior to discharge to Lake Champlain.

III. Limitations and Conditions

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

Effluent Limitations: Pages 2 and 3

Monitoring Requirements: Pages 5, 6, and 7

IV. Permit Basis and Explanation of Effluent Limitation Derivation

History & Summary

On April 8, 2007 the City of St. Albans submitted an application for renewal of their discharge permit.

The wastewater treatment facility provides wastewater treatment capacity for both existing residential and commercial properties and for new development, in areas that lie within the sewered area of the City of St. Albans and the Town of St. Albans.

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 and a draft permit was placed on public comment from June 25, 2007 through July 25, 2007.

Based upon comments received from interested persons and further consideration by the Agency, it was decided to revise the original draft permit and place the revised draft permit on public notice for additional public comment. Therefore a revised draft permit was placed on public comment from the August 31, 2007 through September 30, 2007 to solicit additional comments.

Receiving Water

The draft permit and previous permits identified Stevens Brook as the receiving water for this discharge. However, between the close of the public comment period on this draft permit (September 30, 2007), and the issuance of this final permit, concerns were raised by Agency staff regarding the exact location of the outfall pipe for the St. Albans WWTF.

Consequently the Agency investigated the exact location on the outfall. Based on a site visit and a review of the "Record Plan – City of St. Albans Outfall Sewer -Sheet 2 dated April 1984", it was determined that due to the elevation of the outfall, the receiving water for this discharge is a wetland contiguous with Lake Champlain. Specifically while the pipe outlets in a defined channel, the bottom of the outfall pipe is at 92.4' which is significantly below the lowest recorded lake level, therefore the discharge is constantly under the influence of Lake Champlain.

Effluent Limitations

Flow

This permit includes a flow limitation of 4.0 MGD, annual average, based on the design capacity of the facility. This is unchanged from the previous permit. Flow monitoring is required daily. This facility maintains a continuous discharge.

Biochemical Oxygen Demand (BOD₅), Total Suspended Solids (TSS) and Total Kjeldahl Nitrogen (TKN)

For the Period of June 1 through September 30.

The BOD, TSS, and TKN mass limitations remain at 334 lbs/day, monthly average, and are unchanged from the previous permit. The BOD, TSS and TKN effluent concentration limits are 10 mg/l, monthly average. These limitations are set to maintain the Water Quality Standards in the receiving water and are more restrictive than the BOD and TSS limitation specified for secondary treatment in 40 CFR Part 133.102 and are unchanged from the previous permit. Sampling is required once per week.

For the Period of October 1 through May 31.

The BOD and TSS, mass limitations remain at 1001 lbs/day monthly average and 1501 lbs/day weekly average and are unchanged from the previous permit. The BOD and 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 and are unchanged from the previous permit.

In addition a 50 mg/l, daily maximum, limitation is included in the draft permit. 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 sampling events which would enable the discharger to comply with the weekly average and monthly average permit limitations.

Sampling is required weekly. This is an increase in sampling frequency since the previous permit only requires BOD and TSS sampling twice per month from October 1 through May 31. This sampling frequency has been increased to be consistent with other facilities discharging 1.0 MGD or greater.

Phosphorus

This discharge permit contains a phosphorus effluent mass effluent limit of 6,089 total pounds, annual limitation. This annual effluent limitation is based on the Lake Champlain Phosphorus TMDL, effective November 4, 2002. Specifically, the TMDL allocated 2.762 metric tons per year or 6,089 pounds per year to the St. Albans WWTF.

The annual total pounds are 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 monthly total must be submitted with each monthly monitoring report using form WR-43-PO4. The annual total must be submitted with the December monthly monitoring report.

This permit also contains a phosphorus concentration effluent limitation of 0.5 mg/l, monthly average. This limitation is unchanged from the permit which previously authorized this discharge.

A phosphorus concentration effluent limitation of 0.8 mg/l, monthly average, based upon the requirements of 10 V.S.A. 1266a and an annual average phosphorus concentration limitation of 0.5 mg/l. was proposed in the draft permit. However to reach a pragmatic solution that addresses the positions of several interested parties including the Agency, EPA, and the City of St. Albans,

the 0.5 mg/l, monthly average, phosphorus limitation will be maintained.

This permit requires weekly sampling for total phosphorus. This is an increase in sampling frequency since the previous permit only required phosphorus sampling twice per month from October 1 through May 31. This sampling frequency has been increased to be consistent with other facilities discharging 1.0 MGD or greater.

Ammonia

In order to gather data on the amount of ammonia in this discharge and its potential impact on the receiving water, a “monitor only” requirement for ammonia has been included in this permit. Ammonia monitoring is required once per month.

Escherichia coli bacteria

The *E. coli* limitation is 77/100ml, instantaneous maximum and is based on Section 3-04.B.3 of the Vermont Water Quality Standards. This limitation is unchanged from the previous permit. *E. coli* monitoring is required weekly. This is an increase in sampling frequency since the previous permit only requires *E. coli* monitoring once per month from October 1 through May 31. This sampling frequency has been increased to be consistent with other facilities discharging 1.0 MGD or greater.

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.

Total Residual Chlorine

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

Waste Management Zone

This permit established a waste management zone beginning at the outfall of the St. Albans Wastewater Treatment Facility and extending downstream in the Lake Champlain - Stevens Brook wetland complex to the Route 36 Bridge (approximately 1 mile).

Toxicity Testing and Additional Pollutant Testing

Although the actual receiving water for this discharge is Lake Champlain, the discharge enters a defined channel within the Stevens Brook wetland complex. It is believed that effluent dilution at the point of discharge may be quite low at low lake levels, however typical stream flow dilution calculations are not applicable due to the influence of Lake Champlain water levels. The Agency has decided to retain the WET limitation from the previous permit but remains open to revisiting and reopening the WET limitations should the City conduct an effluent dilution study at low lake levels which supports a less stringent limitation..

It should be noted that Whole Effluent Toxicity (WET) tests conducted on this discharge during the term of the previous permits have indicated that this discharge has not resulted in an instream

toxic impact

Annual Monitoring Requirements

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

Primary Overflow Monitoring

During larger storm events and periods of high runoff from snow melt, the primary clarifier can overflow and cause a portion of the influent to bypass the tertiary treatment process. The overflow is chlorinated and then combines with the tertiary treated effluent and is discharged via S/N 001. In order to ensure compliance with effluent limitations and to gather data on the quality of this combined discharge, the permit requires sampling of the combined effluent during a minimum of 12 overflow events per year. Samples must be analyzed for the parameters and comply with the limitation specified in the permit, except Whole Effluent Toxicity. Grab samples must be representative of the combined discharge during an overflow event to the extent practicable and the results must be noted on the monthly discharge monitoring report and incorporated into the monitoring results.

Operation, Management, and Emergency Response Plan

Per the requirements of the revisions to 10 V.S.A. Section 1278, promulgated in the 2006 legislative session, Condition I.G. was included in the draft permit. The draft permit contained a condition that required submittal of an Operation, Management and Emergency Response Plan for the components of the wastewater treatment facility, pump/ejector stations, and stream crossings by July 1, 2008 and submittal of an Operation, Management and Emergency Response Plan for the sewage collection system by March 31, 2010.

Between the close of the public comment period on this draft permit (September 30, 2007), and the issuance of this final permit, the City of St. Albans submitted an Operation, Management and Emergency Response Plan for the components of the wastewater treatment facility, pump/ejector stations and stream crossings which the Agency reviewed and approved. Therefore Condition I.G.1 now reads:

“The permittee shall implement the Operation, Management and Emergency Response Plan for the wastewater treatment facility, sewage pump/ejector stations, and stream crossings approved by the Agency on August 13, 2008.”

In regards to the Operation, Management and Emergency Response Plan for the sewage collection system, Act 130 was promulgated by the legislature during the 2008 legislative session which modified 10 V.S.A. 1278 to require that Operation, Management and Emergency Response Plan for the sewage collection systems, be submitted by July 1, 2010.

Therefore to be consistent with 10 V.S.A. 1278, Condition I.G.2 has been modified and requires submission of an Operation, Management and Emergency Response Plan for the sewage collection systems, by July 1, 2010.

Engineering Evaluation

Since the St. Albans WWTF was constructed and/or upgraded more than 20 years ago, Condition I.H. has been included in the permit. This condition requires that an in-depth engineering

evaluation/inspection of the facility be conducted and a written report submitted to the Agency by December 31, 2012.

Combined Sewer Overflows (CSOs)

In 2007, the Agency issued 1272 Order No. 3-1279-A1 to St. Albans. This Order required the City to assess their collection system for any remaining overflows that were not eliminated during the CSO elimination project conducted in the late 1980s.

This assessment identified one CSO in the collection system. The overflow is located on lower Welden Street and discharges to Stevens Brook.

Therefore on August 21, 2008, the Agency issued 1272 Order No. 3-1279-A2 to St. Albans. This Order required the City to formally assess the “Welden Street” CSO and develop a plan for its correction by no later than June 30, 2009, and implement best management practices for a combined sewer system.

In addition to this 1272 Order to address the CSO, Condition I.A.I has been added to the permit. This condition mandates that St. Albans comply with the requirements of 1272 Order No. 3-1279-A2 and requires implementation of the following controls to reduce the combined sewer overflow discharge and its effects on the quality of the receiving water:

- a. implementation of proper operation and regular maintenance programs for the sewer system and the combined sewer overflow such as routine catch-basin, sewer, and interceptor cleaning;
- b. maximizing the use of the collection system for storage;
- c. maximizing wet-weather flow to the wastewater treatment facility;
- d. elimination of any discharge from combined sewer overflow during dry weather;
- e. control of solid and floatable material in the combined sewer overflow;
- f. pollution prevention programs such as litter control and street sweeping to reduce the contaminants in the combined sewer overflow discharge;
- g. implementation of a public notification process to ensure that the public receives adequate notification of when and where a combined sewer overflow discharge occurs;
- h. monitoring to characterize the impacts of the combined sewer overflow discharge and to determine the effectiveness of these controls.

With respect to the review and modification of pretreatment requirements to ensure that CSO impacts are minimized, VT ANR administers the Pretreatment Program in Vermont. There are 3 facilities in the St. Albans collection system with pretreatment permits and one of these facility has a discharge upstream of the CSO outfall. The Agency will evaluate this discharge and its effects on the quality of the CSO upon renewal of its pretreatment discharge permit.

VI. Procedures for Formulation of Final Determinations

The original public comment period for receiving comments on this draft permit was from June 25, 2007 through July 25, 2007 during which time interested persons submitted their written

views on the draft permit.

The Agency then revised this draft permit and placed it on public comment from the August 31, 2007 through September 30, 2007 to solicit additional comments.

During this time interested persons could submit their written views on the revised 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 could 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 could also be faxed to: 802-241-2596.

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

The Department will hold a hearing if there is significant public interest in holding such a hearing. Any public hearing brought in response to such a request or petition will be held in the geographical area of the draft discharge or other appropriate area, at the discretion of the Department and may, as appropriate, consider related groups of draft permits. Any person may submit oral or written statements and data concerning the draft permit at the public hearing. The Department may establish reasonable limits on the time allowed for oral statements and may require the submission of statements in writing. All statements, comments, and data presented at the public hearing will be retained by the Department and considered in the formulation of the final determination to issue, deny, or modify the draft permit.

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

RESPONSE SUMMARY FOR
DRAFT DISCHARGE PERMIT No. 3-1279
Proposed NPDES Municipal Discharge Permit
for the
City of St. Albans

This was the proposed renewal of an existing discharge permit which incorporated the requirements of the Lake Champlain TMDL for phosphorus and the requirements of the revisions to 10 V.S.A. Sections 1263 and 1278 which were promulgated in the 2006 legislative session.

Originally a draft permit for this discharge was placed on public comment from June 25, 2007 through July 25, 2007. Based upon comments received from interested persons and further consideration by the Agency, it was decided to revise the draft permit and place the revised draft permit on public notice for additional public comment.

Consequently, since the Agency revised this draft permit, it was placed on public comment from August 31, 2007 through September 30, 2007 to solicit additional comments.

Comments were received during the public notice period from Conservation Law Foundation and the City of St. Albans. The following is a summary of the relevant comments received on this draft Discharge Permit, and the Agency's responses to these comments.

Comment 1: 10 V.S.A Section 1263(d)(3) requires that a discharge permit contain an operation, management, and emergency response plan. By failing to immediately require such a plan pursuant to the specific timetable the law establishes and by failing to incorporate the plan as a part of the permit, the draft permit does not comply with the central requirements of the law.

Response 1: While the Agency disagrees with this comment, this issue has been superseded by events which render this comment no longer relevant.

Specifically, between the close of the public comment period on this draft permit (September 30, 2007), and the issuance of this final permit, the City of St. Albans submitted an Operation, Management and Emergency Response Plan for the components of the wastewater treatment facility, pump/ejector stations and stream crossings which the Agency reviewed and approved. Therefore Condition I.G.1 now reads:

“The permittee shall implement the Operation, Management and Emergency Response Plan for the wastewater treatment facility, sewage pump/ejector stations, and stream crossings approved by the Agency on **August 13, 2008.**”

In regards to the Operation, Management and Emergency Response Plan for the sewage collection system, Act 130 was promulgated by the legislature during the 2008 legislative session which modified 10 V.S.A. 1278 to require that Operation, Management and

Emergency Response Plan for the sewage collection systems be submitted by July 1, 2010.

Therefore to be consistent with 10 V.S.A. 1278, Condition I.G.2 has been modified and requires submission of an Operation, Management and Emergency Response Plan for the sewage collection systems, by July 1, 2010.

Comment 2: The permit violates the anti-backsliding provisions of the Clean Water Act (Section 402(o)) by replacing the 0.5 mg/l, monthly average, total phosphorus effluent limitation with a total phosphorus effluent limitations of 6089 total annual pounds, and 0.8 mg/l, monthly average.

Response 2: While the Agency continues to maintain that the phosphorus limitations in the draft permit does not violate the anti-backsliding provisions of the Clean Water Act, the Agency has retained the 0.5 mg/l, monthly average, phosphorus limitation to resolve the positions of various interested parties.

The original 0.5 mg/l, monthly average, effluent limitation was neither a water quality based effluent limitation or a technology based effluent limitation. This effluent limitation was a "Best Professional Judgment" limitation developed by the Agency at the time the St. Albans WWTF was upgraded in the mid-1980s. At that time the Agency was concerned about the degraded water quality in St. Albans Bay and attempted to set a limitation that could improve water quality andt was reliably achievable by the upgraded WWTF. There were no scientific studies or operational studies done to support this limitation.

The proposed annual phosphorus limitation of 6089 total pounds is a Water Quality Based Effluent Limitation that was derived during the development of the Lake Champlain Phosphorus TMDL. The Lake Champlain Phosphorus TMDL was approved and became effective on November 4, 2002. As part of the TMDL allocation process, 2.762 metric tons per year (6089 pounds per year) were allocated to the St. Albans WWTF discharge. All direct discharges containing phosphorus in the Lake Champlain basin and all non-point sources of phosphorus (such as agricultural runoff) were subject to the TMDL process and received an allocation of phosphorus. Compliance with all these allocations will ensure the water quality standards for phosphorus in Lake Champlain will be achieved.

However to reach a pragmatic solution that addresses the positions of several interested parties including the Agency, EPA, and the City of St. Albans, the 0.5 mg/l, monthly average, phosphorus limitation will be maintained.

Comment 3: Submittal of an Operation, Management and Emergency Response Plan by April 1, 2008 may not be realistic for a wastewater treatment facility the size of St. Albans and this deadline should be extended to July 1, 2008.

Response 3: As discussed in Response 1 above, this comment has been superseded by events and is no longer relevant since an Operation, Management and Emergency Response Plan for the wastewater treatment facility, pump stations/ejector stations, and stream crossings was submitted by the City and approved by the Agency.

Comment 4: The 0.5 mg/l annual average phosphorus limitation should not be included in the draft permit since the facility complies with both the mass limitation based on the TMDL and the 0.8 mg/l limitation based upon 10 V.S.A. 1266a.

Response 4: As stated in Response 3 above to reach a pragmatic solution that addresses the needs of several interested parties including the Agency, EPA, and the City of St. Albans, regarding the discharge from the St. Albans Wastewater Treatment Facility, the 0.5 mg/l, monthly average, phosphorus limitation will be retained in the final permit.