

Vermont Department of Environmental Conservation

Watershed Management Division 1 National Life Drive, Main-2 Montpelier VT 05620-3522 Agency of Natural Resources

[phone] {

802-828-1535 802-828-1544

March 19, 2013

Terrance A Morse Town of Bennington PO Box 469 Bennington, VT 05201

Re: Final Amended Discharge Permit #3-1504

Dear Mr Morse:

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

If you have any questions concerning your permit, please contact Carol Carpenter at 490-6182.

Sincerely,

Ernest F Kelley, Manager

Wastewater Management Program

Enclosure

AGENCY OF NATURAL RESOURCES DEPARTMENT OF ENVIRONMENTAL CONSERVATION WATERSHED MANAGEMENT DIVISION ONE NATIONAL LIFE DRIVE, MAIN BUILDING, 2nd FLOOR MONTPELIER VT 05620-3522

Permit No. 3-1504 Project ID No. RU96-0131 NPDES No. VT0001147

AMENDED DISCHARGE PERMIT

In compliance with the provisions of the Vermont Water Pollution Control Act, as amended, (10 V.S.A. Chapter 47 §1251 et. seq), and the Federal Clean Water Act, as amended (33 U.S.C. § 1251 et. seq),

Town of Bennington PO Box 469 205 South Street Bennington, VT 05201

(hereinafter referred to as the "permittee") is authorized, by the Secretary, Agency of Natural Resources, to discharge from a facility located at:

Bennington Water Treatment Facility 1378 Route 9 Woodford, Vermont

to the Roaring Branch, Class B at the point of discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III hereof.

This permit shall become effective on the date of signing.

This permit and the authorization to discharge shall expire on March 31, 2014.

State of Vermont Agency of Natural Resources

David K. Mears, Commissioner Department of Environmental Conservation

BY:

Digitally signed by Peter LaFlamme DN: cn=Peter LaFlamme, o=VTDEC, ou=Watershed Management Division, email=pete.laflamme@state.vt.us,

Date: 2013.03.18 11:23:27 -04'00'

Peter LaFlamme, Director Watershed Management Division

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Until March 31, 2014, the permittee is authorized to discharge from outfall serial number S/N 001: Filter rinse water and emergency potable water overflow to the Roaring Branch. Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations		Monitoring Requirements	
Effluent Characteristic	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow	0.042 MGD	0.084 MGD	Daily	Calculated
Turbidity		10 NTU	Daily	Maximum recorded value
рН	Between 6.5 and 8.5 Standard Units		Daily	Min/Max

Samples from the <u>emergency overflows</u> discharge taken in compliance with the monitoring requirements specified above shall be collected at manhole DMH 9. A note shall be made on the monthly monitoring report when there is a discharge from an emergency overflow. The note shall identify the specific emergency discharge.

- (1) **Daily monitoring is required only when a discharge event is occurring.** If a discharge is occurring from multiple discharge points on the same day, then a separate sample shall be collected and analyzed from <u>each</u> discharge point.
- (2) The effluent pH may be lower than 6.5 Standard Units, provided the effluent pH is not more than 0.2 S.U. lower than the raw (intake) water pH. (i.e. if the raw water pH reading is 5.5 S.U. than the effluent must be at least 5.3 S.U.) The values, and the difference(s), shall be reported on the Discharge Monitoring Report Form.

2. Until March 31, 2014, the permittee is authorized to discharge from outfall serial number S/N 002: Effluent from the thickener tank overflow, filtered and dewatered solids, and emergency overflows including the 1.2 million gallon clearwell to the Roaring Branch. Such discharges shall be limited and monitored by the permittee as specified below:

	Discharge Limitations		Monitoring Requirements	
Effluent Characteristic	Monthly Average	Daily Maximum	Measurement Frequency (1)	Sample Type
Flow	0.350 MGD	0.650 MGD	Daily	Calculated
Turbidity		10 NTU	1 x daily	Grab
Total Residual Chlorine (2)		0.1 mg/l	1 x daily	Grab
pН	Between 6.5 and 8.5 Standard Units (3)		1 x daily	Grab

Samples from the <u>thickener tank overflow</u> shall be taken in compliance with the monitoring requirements specified above shall be collected at the sample tap on the north wall of the treatment facility building (pumped from the metering pit).

Samples from the <u>freezing/drying bed</u> discharge taken in compliance with the monitoring requirements specified above shall be collected at manhole DMH 13 immediately adjacent to the freezing/drying bed and prior to mixing with groundwater and stormwater (Sheet C6, dated 2/27/04, prepared by Dufresne & Associates, PC). A note shall be made on the monthly monitoring report when there is a discharge from the freezing/drying bed.

Samples from the <u>emergency overflows</u> discharge taken in compliance with the monitoring requirements specified above shall be collected at a representative location (i.e. a sample from the 1.2 million gallon clearwell shall be collected at the clearwell sample manhole; Sheet C6, dated 1/07, prepared by Dufresne & Associates, PC) A note shall be made on the monthly monitoring report when there is a discharge from an emergency overflow. The note shall identify the specific emergency discharge.

- (1) **Daily monitoring is required only when a discharge event is occurring.** If a discharge is occurring from multiple discharge points (i.e. from the thickener tank overflow and from the freezing/drying bed) on the same day, then a separate sample shall be collected and analyzed from <u>each</u> discharge point.
- (2) Total Residual Chlorine shall be monitored <u>only</u> if there is an emergency discharge from the 1.2 million gallon clearwell. A note shall be included on the Discharge Monitoring Report Form indicating the date(s) and the amount of chlorinated discharge that occurred.
- (3) The effluent pH may be lower than 6.5 Standard Units, provided the effluent pH is not more than 0.2 S.U. lower than the raw (intake) water pH. (i.e. if the raw water pH reading is 5.5 S.U. than the effluent must be at least 5.3 S.U.) Both values, and the difference, shall be reported on the Discharge Monitoring Report Form.

B. SPECIAL CONDITIONS

- 1. Within 90 days of the effective date of this permit, additional rip rap shall be placed at the S/N 001 and S/N 002 discharge points to control erosion.
- 2. In addition, the discharge from S/N 001 and S/N 002 shall be controlled, if necessary, by gate valves located before the headwall such that instances of erosion and violations of the water quality standards are prevented.
- 3. The use of corrosion control products which contain priority pollutants (e.g. zinc) or phosphorus is prohibited without prior written approval from the Department.
- 4. The discharge of water containing chlorine to S/N 001 and/or S/N 002 is specifically prohibited with the exception of an emergency discharge from the 1.2 million gallon clearwell (S/N 002).
- 5. Floor drains and/or discharges from the chemical storage area to the Roaring Branch are prohibited.

C. REAPPLICATION

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

Reapply for a Discharge Permit by: September 30, 2013.

D. OPERATING FEES

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

E. MONITORING AND REPORTING

1. Sampling and Analysis

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

If applicable, Escherichia coli shall be tested using 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 <u>membrane filtration</u> (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. Reporting

The Permittee is required to submit monitoring results as specified on a Discharge Monitoring Report (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
Watershed Management Division
One National Life Drive, Main Building, 2nd Floor
Montpelier VT 05620-3522

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.

3. 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.

4. 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.

PART II

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, production increases, 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.

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.

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 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, necessary to maintain compliance with the terms and conditions of this permit, is prohibited, except where authorized under 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;
- 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, One National Life Drive, Main Building, 2nd Floor, Montpelier VT 05620-3522.

10. Power Failure

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. Provide an alternative power source sufficient to operate the wastewater control facilities, or if such alternative power source is not in existence,
- b. Halt, reduce, or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

B. RESPONSIBILITIES

1. Right of Entry

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

- 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 at a minimum:

- a. a properly completed application form as 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

That 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 the permit, the secretary shall revise or modify the permit in accordance with the toxic effluent standard or prohibition and so notify the permittee.

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. Civil and Criminal Liability

Except as provided in, "Bypass" (Part II, paragraph A.5.), "Power Failure" (Part II, paragraph A.10.), and "Emergency Pollution Permits" (Part II, paragraph A.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.

8. 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.

9. 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.

10. 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.

11. 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.

PART III

A. OTHER REQUIREMENTS

This permit shall be modified, suspended or revoked to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (C), and (D), 304(b) (2), and 307 (a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

- 1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- 2. Controls any pollutant not limited in the permit.

The permit as modified under this paragraph shall also contain any other requirements of the Vermont Water Pollution Control Act then applicable.

B. **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 limitation 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 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

Watershed Management Division

One National Life Drive, Main Building, 2nd Floor

Montpelier VT 05620-3522

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.

AGENCY OF NATURAL RESOURCES DEPARTMENT OF ENVIRONMENTAL CONSERVATION WATERSHED MANAGEMENT DIVISION 1 NATIONAL LIFE DRIVE – MAIN 2 MONTPELIER, VERMONT 05620-3522

FACT SHEET (amended February 2013)

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

NPDES NO: VT0001147 PERMIT NO: 3-1504

PROJECT ID NO: RU96-0131

NAME AND ADDRESS OF APPLICANT:

Town of Bennington PO Box 469 205 South Street Bennington, VT 05201

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Bennington Water Treatment Facility 1378 Route 9 Woodford, Vermont

RECEIVING WATER: Roaring Branch River

CLASSIFICATION: Class B. Class B waters are suitable for bathing and recreation, irrigation and agricultural uses; good fish habitat; good aesthetic value; acceptable for public water supply with filtration and disinfection.

I. <u>Proposed Action, Type of Facility, and Discharge Location</u>

The above named applicant applied on January 16, 2013 to the Vermont Department of Environmental Conservation for an amendment to their permit to increase the daily flow from Discharge Point S/N 002 into the designated receiving water. At this time the Department has made a tentative decision to amend the discharge permit. The facility is engaged in the treatment of municipal drinking water. The discharge is from two outfalls at the Town of Bennington Water Treatment Facility to the Roaring Branch.

II. <u>Description of Discharge</u>

A quantitative description of the discharge in terms of significant effluent parameters is based on state and federal laws and regulations, the discharge permit application, and the recent self-monitoring data.

The complete application, draft permit, and other information used in the development of this permit are on file and may be inspected at the VTDEC, Watershed Management Division, 1 National Life Drive, Montpelier, VT. Copies will be made at a cost based on the current Secretary of State Official Fee Schedule for Copying Public Records from 8:00 AM to 4:30 PM, Monday through Friday. The draft permit and fact sheet may also be viewed on the Division's website at http://www.watershedmanagement.vt.gov/

III. Limitations and Conditions

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

Effluent Limitations: Pages 2 and 3 of 14 Monitoring Requirements: Pages 2 and 3 of 14+

IV. Permit Basis and Explanation of Effluent Limitation Derivation

The Town of Bennington owns and operates the Bennington Water Treatment Facility located on Route 9 in Woodford. The original facility was constructed in 1977 to process surface water (from Bolles Brook) to potable drinking water for the Town of Bennington.

In 2006, improvements to the intake and treatment facility were undertaken to comply with federal and State drinking water regulations. Prior to the upgrade the facility was not in compliance with disinfection contact time. Improvements included: the removal of the two settling lagoons; and construction of a filtered water pump station, a 1.2 million gallon water storage tank, a 200,000 gallon process residuals thickener tank, a 6,000 square foot freezing/drying bed for solids removal, a lime silo, and a carbon dioxide storage and feed system.

Following several permit violations on the S/N 002 flow limit, an application for permit amendment was submitted for an increase in the monthly average and daily maximum flow limits for S/N 002. The request was made in response to increased filter backwashes due to high turbidity (after rain events) in the raw water, particularly since tropical storm Irene in 2011 which wrecked havoc on Bolles Brook.

Discharge Point S/N 001:

No changes are proposed for the S/N 001 discharge.

Discharge Point S/N 002:

The residuals from the filter backwash water, settling tube settled solids, and the debris collected in the flocculator are initially held in inplant backwash holding cells located below the facility floor. The residuals are then pumped to the thickener where the solids settle out and the decant clarified water overflows the thickener tank and discharges directly to S/N 002. The 'solids' are transferred to the freezing/drying bed for filtering prior to discharge which only occurs a couple of times annually.

Discharge point S/N 002 thus consists of the discharge from thickener overflow and the freezing/drying bed. In an emergency the discharge may consist of water from the 1.2 million gallon clearwell and emergency overflow from the inplant backwash water holding cell provided that the discharges do not violate any of the permit conditions and the Vermont Water Quality Standards.

Flow - As requested by the permittee, the monthly average flow is proposed to be increased from 0.200 MGD to 0.350 MGD and the maximum daily flow is proposed to be increased from 0.300 MGD to 0.650 MGD.

Turbidity, Total Residual Chlorine, and pH – No changes are proposed for the current limitations and monitoring requirements.

Antidegradation Policy and Discharge Policy -

Section 1-03.B.1.of the Vermont Water Quality Standards requires that the existing uses of the receiving waters be protected and maintained and the Secretary must consider the following factors in making a determination:

- a. Aquatic biota and wildlife that utilize or are present in the waters;
- b. Habitat that supports existing aquatic biota, wildlife and plant life;
- c. The use of the waters for recreation or fishing;
- d. The use of the water for water supply, or commercial activity that directly depends on the preservation of an existing high level of water quality; and
- e. with regards to the factors considered under (a) and (b) above, the evidence of the uses ecological significance in the functioning of the ecosystems or evidence of the use's rarity.

These factors have been considered in conjunction with this discharge and it has been determined that the existing uses of the receiving water will be maintained.

Section 1-03.C.2 of the Vermont Water Quality Standards requires that higher quality water be protected and the risk minimized to existing and designated uses. In addition a limited reduction in the existing higher quality of the waters may only be allowed if:

- a. the adverse economic and social impacts on the people of the state from maintaining the higher quality waters would be substantial and widespread;
- b. these adverse impacts would exceed the environmental, economic, social, and

other benefits of maintaining the higher water quality; and

c. there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources, and all cost effective and reasonable accepted agricultural practices and best management practices, as appropriate for nonpoint source control, consistent with state law.

With respect to these requirements, this facility provides potable water to the residents of Bennington. In recent years, improvements to the intake and treatment facility were required to be undertaken to comply with federal and state drinking water regulations As a result, it is necessary to increase the discharge from thickener overflow and the filtered water from the freezing/drying bed to the Roaring Branch River from 0.200 MGD to 0.350 MGD monthly average and from 0.300 MGD to 0.650 MGD, daily maximum. This increased discharge will allow the facility to operate properly and meet drinking water treatment regulations and standards. If this increased discharge does not occur there will be widespread impacts (i.e. lack if sufficient and proper treatment) to the service area. Therefore the requirements of a. and b. above have been met. With respect to c. above, except for the increased volume of the discharge (flow), the permitted effluent limitations will not change from the concentrations in the current permit. As a result, this increased discharge will not result in a measurable change in the pollutants in the effluent or the receiving water.

Per Section 1-04.A of the Vermont Water Quality Standards, new discharges of wastes may be allowed only when all the following criteria are met:

- 1. The proposed discharge is in conformance with all applicable provisions of these rules including classification of the receiving waters adopted by the Board as set forth in Chapter 4 of these rules.
- 2. There is neither an alternative method of waste disposal, nor an alternative location for waste disposal, that would have a lesser impact on water quality including the quality of groundwater, or if there is such an alternative method or location, it would clearly unreasonable to require its use.
- 3. The design and operation of any waste treatment or disposal facility is adequate and sufficiently reliable to ensure the full support of uses and to ensure compliance with these rules and with all applicable state and federal treatment requirements and effluent limitations.
- 4. Except as provided for in 10 V.S.A. 1259(d) and (f), the discharge of wastes other than nonpolluting wastes and stormwater is prohibited in Class A waters regardless of the degree of treatment provided.
- 5. Except as provided for in 10 V.S.A. 1259, the discharge of wastes that, prior to treatment, contained organisms pathogenic to human beings is prohibited.
- 6. The receiving waters will have sufficient assimilative capacity to accommodate the proposed discharge.
- 7. Assimilative capacity has been allocated to the proposed discharge consistent with the classification set forth in Chapter 4 of these rules.
- 8. The discharge of wastes to the thermocline or hypolimnion of any lake in manner that may prevent full support of uses is prohibited.

9. The discharge of sewage into Class B waters shall not pose more than a negligible risk public health. Compliance with this criterion shall include as assessment of both the level and reliability of treatment achieved and the impact of the discharge on the water quality of the receiving waters.

The Agency finds that these criteria have been met. Specifically,

- 1. The discharge conforms with the classification of the receiving water.
- 2. Due to the volume of water, geologic formations, and site limitations, infiltration or spray irrigation is not a feasible alternative for disposal for the increased volume of this wastewater. Therefore, the only alternative is to increase the currently permitted discharge of wastewater to waters of the State.
- 3. Based on the current design of the facility, the pollutants will not result in any measurable change in the receiving water and full support of all uses will be ensured.
- 4. The discharge is not to a Class A water.
- 5. The discharge, prior to treatment, does not contain organisms pathogenic to humans.
- 6. Adequate assimilative capacity exists to accommodate this discharge.
- 7. See 6 above.
- 8. The discharge is not to a lake.
- 9. The discharge does not contain sewage.

V. <u>Procedures for Formulation of Final Determinations</u>

The public comment period for receiving comments on this draft permit is from February 11 through March 13, 2013 during which time interested persons may submit their written views on the draft permit. All written comments received by 4:30 PM on March 13, 2013 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 Watershed Management Division – Main 2 1 National Life Drive Montpelier, VT 05620-3522

Comments may also be faxed to: 802-828-1544 or submitted by e-mail using the e-mail comment provisions included at http://www.watershedmanagement.vt.gov/

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

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

No comments were received during the public notice period.