

Wastewater Management Division  
103 South Main Street - Sewing Bldg.  
Waterbury, Vermont 05671-0405Telephone: (802) 241-3822  
Fax: (802) 241-2596  
[www.anr.state.vt.us/dec/ww/wwmd.cfm](http://www.anr.state.vt.us/dec/ww/wwmd.cfm)

April 20, 2007

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

We have kept Special Condition I.A.3. requiring upgrade completion notification in the amended permit as we have not yet received a sign-off from the engineer as expected. The Department has been informed by Roger Ward, Dufresne & Associates that it will receive this notification in late May.

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

Sincerely,

  
Brian D. Kooiker, Chief  
Discharge Permits Section

Enclosure

cc: Roger Ward, Dufresne & Associates  
DEC, Water Supply Division

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

Permit No: 3-1504  
File No: 02-16  
PIN: 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.**),

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

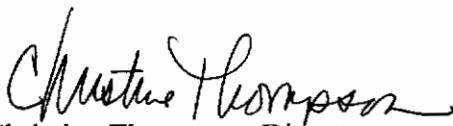
to the Roaring Branch, in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III hereof.

This permit shall become effective on the date of signing.

This permit and the authorization to discharge shall expire on March 31, 2009.

Signed this 20<sup>th</sup> day of April, 2007.

Jeffrey Wennberg, Commissioner  
Department of Environmental Conservation

By   
Christine Thompson, Director  
Wastewater Management Division

**PART I****A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. During the period beginning on the date of signing and lasting through March 31, 2009, 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:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Average	Maximum Day	Measurement Frequency	Sample Type
Flow	0.042 MGD	0.084 MGD	Daily	Estimate
Turbidity		10 NTU	1 x Daily	Grab
pH	Between 6.5 and 8.5 Standard Units <sup>(1)</sup>		1 x Daily	Grab

Samples taken in compliance with the monitoring requirements specified above shall be collected at manhole DMH 9 (Sheet C6, dated 2/27/04, prepared by Dufresne & Associates, PC) prior to discharge to the Roaring Branch.

- (1) 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.**

2. During the period beginning on the date of signing and lasting through March 31, 2009, 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:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Average	Maximum Day	Measurement Frequency (1)	Sample Type
Flow	0.135 MGD	0.200 MGD	Daily	Estimate
Turbidity		10 NTU	1 x Daily	Grab
Total Residual Chlorine <sup>(2)</sup>		0.1 mg/l	1 x Daily	Grab
pH	Between 6.5 and 8.5 Standard Units <sup>(3)</sup>		1 x Daily	Grab

Samples from the freezing/drying bed 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).

Samples from the thickener tank overflow taken in compliance with the monitoring requirements specified above shall be collected at the metering pit (Sheet C08, dated 6/9/06, prepared by Dufresne & Associates, PC) prior to mixing with groundwater and stormwater.

Samples from the emergency overflows discharge taken in compliance with the monitoring requirements specified above shall be collected at manhole DMH1 (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 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. DMH13, metering pit, DMH1) on the same day, then a separate sample shall be collected and analyzed from each manhole.
- (2) **Total Residual Chlorine shall be monitored only if there is an emergency discharge from the 1.2 million gallon clearwell.**
- (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. then the effluent must be at least 5.3 S.U.) **Both values, and the difference, shall be reported on the Discharge Monitoring Report Form.**

**3. Special Conditions:**

- a. The upgrade of the Bennington Water Treatment Facility shall be considered complete when the permittee notifies the Department, by means of a Vermont registered professional engineer's certification, that the new facility is operational.
- b. The flows 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.
- c. The use of corrosion control products which contain priority pollutants (e.g. zinc) or phosphorus is prohibited without prior written approval from the Department.
- d. 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).
- e. Floor drains and/or discharges from the chemical storage area to the Roaring Branch are prohibited.

**B. REAPPLICATION**

If the permittee desires to continue to discharge after the expiration date of this permit, he 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, 2008.

**C. OPERATING FEES**

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

**D. MONITORING AND REPORTING****1. Sampling and Analysis**

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

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

Samples shall be representative of the volume and quality of effluent discharged over the

sampling and reporting period. All samples are to be taken during normal operating hours. The permittee shall identify the effluent sampling location used for each discharge.

## 2. Reporting

The Permittee is required to submit monitoring results as specified on a Discharge Monitoring Report (Form WR-43). Reports are due on the 15<sup>th</sup> 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, The Sewing Building  
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.

## 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. 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

### **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 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.

#### **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 permit the Secretary or authorized representative, upon the presentation of proper credentials:

- a. to enter upon the permittee's premises in which an effluent source or any records required to be kept under terms and conditions of the permit are located;
- b. to have access to and copy any records required to be kept under the terms and conditions of the permit;
- c. to inspect any monitoring equipment or method required in the permit; or
- d. to sample any discharge of pollutants.

#### **2. Transfer of Ownership or Control**

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

application must include as a minimum; a written statement from the prospective owner or operator certifying:

- a. The conditions of the operation that contribute to, or affect, the discharge will not be materially different under the new ownership.
- b. The prospective owner or operator has read and is familiar with the terms of the permit and agrees to comply with all terms and conditions of the permit.
- c. The prospective owner or operator has adequate funding to operate and maintain the treatment system and remain in compliance with the terms and conditions of the permit.
- d. The date of the sale or transfer.

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

### **3. Confidentiality**

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

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

### **4. Permit Modification**

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

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

### **5. Toxic Effluent Standards**

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  
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.

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

FACT SHEET  
(amended March 2007)

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

NPDES NO: VT0001147  
FILE NO: 02-16  
PERMIT NO: 3-1504  
PROJECT ID NO: RU96-0131

NAME AND ADDRESS OF APPLICANT:

Town of Bennington  
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

CLASSIFICATION: Class B

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

The above named applicant applied on February 13, 2007 to the Vermont Department of Environmental Conservation for an amended permit to increase the daily maximum flow from Discharge Point S/N 002 and to change the effluent pH range for Discharge Points S/N 001 and 002 to account for the actual pH level of the raw (intake) water. At this time the Department has made a tentative decision to issue an amended 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. Description of Discharge

A quantitative description of the discharge in terms of significant effluent parameters is based on state and federal laws and regulations and the discharge permit application.

### 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 13  
Monitoring Requirements:   Pages 2 and 3 of 13

### 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 facility was constructed in 1977 to process surface water (from Bolles Brook) to potable drinking water for the Town of Bennington. The facility currently uses four modular Neptune Aquarius AQ-300 package units that include a flocculator, settling tubes, and filter each having a maximum hydraulic capacity of 1.0 million gallons per day. The filter backwash water is currently discharged to two settling lagoons.

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 construction of a diversion vault and mechanical screen at the intake; 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.

#### **Discharge Point S/N 001:**

S/N 001 consists of the discharge from the filtered rinse water, with a maximum daily flow of 84,000 gallons, based on four filters rinsing twice a day for 15 minutes each at 700 gpm. In an emergency, discharges from the inplant clearwell overflow, overflow from the pump station clearwell, treated water overflow, drains from the inplant clearwell, filtered water cell of the pump station, and treated water cell of the pump station may be discharged provided that the discharges do not violate any of the permit conditions and the Vermont Water Quality Standards. (In particular, high pH discharges (drain and overflow) from the treated water cell (cell 2) of the pump station will require pH adjustment prior to any emergency discharge.) Monitoring occurs at manhole DMH 9 (see Sheet C6, dated 2/27/04, prepared by Dufresne & Associates, PC).

#### **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 water either overflows the thickener tank and discharges directly to S/N 002 or is transferred to the freezing/drying bed for filtering prior to discharge.

Discharge point S/N 002 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. The monthly average flow is proposed to be 135,000 gpd and the maximum daily flow is proposed to be 200,000 gallons. (The previous permit contained a maximum daily flow of 135,000 gpd which could not be met based on monitoring results from December 2006 and January 2007.) According to the application, the increase in discharge is directly related to the volume of filter backwash water, flocculator, and settling tube draining during backwash. (The draining to the flocc basin and settling tube basin were not included in the original calculations for the previous permit.) Further, the number of backwashes may increase depending on the raw water turbidity. (i.e. Heavy rains in 2006 contributed to an increase in raw water turbidity requiring additional filter backwashes.)

Monitoring for the thickener overflow occurs at the process waste metering pit (see Sheet CO8, dated 6/9/06, prepared by Dufresne & Associates, PC) immediately adjacent to the thickener and prior to mixing with groundwater and stormwater. Monitoring for the freezing/drying bed discharge occurs at manhole DMH 13 (see Sheet C6, dated 2/27/04, prepared by Dufresne & Associates, PC) immediately adjacent to the bed and prior to mixing with groundwater and stormwater. Because the 1.2 million gallon clearwell will contain chlorinated water, a dechlorination unit will automatically feed sodium bisulfate (at manhole DMH 2) to the discharge should it occur. Monitoring for any emergency overflow will occur at DMH 1.

**Floor Drains** - The floor drains from the pump station discharge to a cast-in-place concrete tank located to the west of the pump station. The holding tank has a level sensor and alarm system to identify when a high level in the tank occurs. The signal is connected to the SCADA system which is necessary because the facility is not staffed 24 hours a day. The discharge from these floor drains will be trucked to the Town's wastewater treatment facility as necessary. One existing floor drain in the existing building remains for discharges from a sink and emergency eyewash. This floor drain is connected to the existing septic system. Two other existing floor drains in the building were permanently sealed.

### **Flow**

**S/N 001:** The effluent flow limitation for S/N 001 is 42,000 gpd, monthly average, and 84,000 gpd, daily maximum. The discharge is intermittent.

**S/N 002:** The effluent flow limitation for S/N 002 is proposed to be 135,000 gpd, monthly average and 200,000 gpd, daily maximum. The discharge is intermittent.

### **Turbidity**

**S/N 001 and S/N 002:** A limit of 10 mg/l for S/N 001 and S/N 002 as required by Section 3-04 of the Vermont Water Quality Standards, effective July 2, 2000 is included in the permit. Daily monitoring for S/N 001 is required. Daily monitoring of S/N 002 is required when the discharge is occurring.

### **Total Residual Chlorine**

**S/N 002:** A limit of 0.1 mg/l is required when a discharge from the 1.2 million gallon clearwell occurs, which will be infrequent (if at all) as this is an emergency discharge only. Dechlorination equipment is housed within the existing chlorine storage room. Sodium bisulfate will be injected

to manhole DMH 2 through small diameter tubing in a 4-inch diameter conduit if an overflow occurs. The mechanism to detect an overflow will include a pressure sensor that detects tank level. When the level indicates an overflow, the SCADA system will activate the dechlorination pump. A note must be included on the monthly monitoring report if a discharge from this clearwell occurs.

### **pH**

**S/N 001 and S/N 002:** The pH limitation as specified in Section 3-01 B.9. in the Vermont Water Quality Standards, effective July 2, 2000 is 6.5 - 8.5 Standard Units. However the intake water from Bolles Brook (Class A) is significantly lower than the pH range in the WQS. As a result, the amendment proposes to allow the discharge to the Roaring Branch to be up to 0.2 Standard Units less than the intake water pH. (note: Bolles Brook enters the Roaring Branch about 1500 feet upstream of the proposed discharge points.)

Monitoring is required daily for S/N 001 and daily when a discharge is occurring at S/N 002.

### V. Procedures for Formulation of Final Determinations

The public comment period for receiving comments on this draft permit is from March 19 through April 18, 2007 during which time interested persons may submit their written views on the draft permit. All written comments received by 4:30 PM on April 18, 2007 will be retained by the Department and considered in the formulation of the final determination to issue, deny or modify the draft permit. The period of comment may be extended at the discretion of the Department.

Written comments should be sent to:

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

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

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

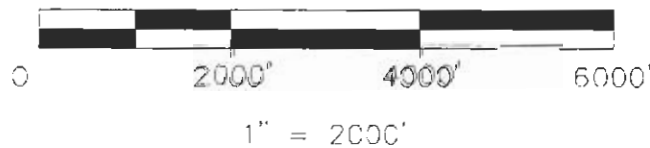
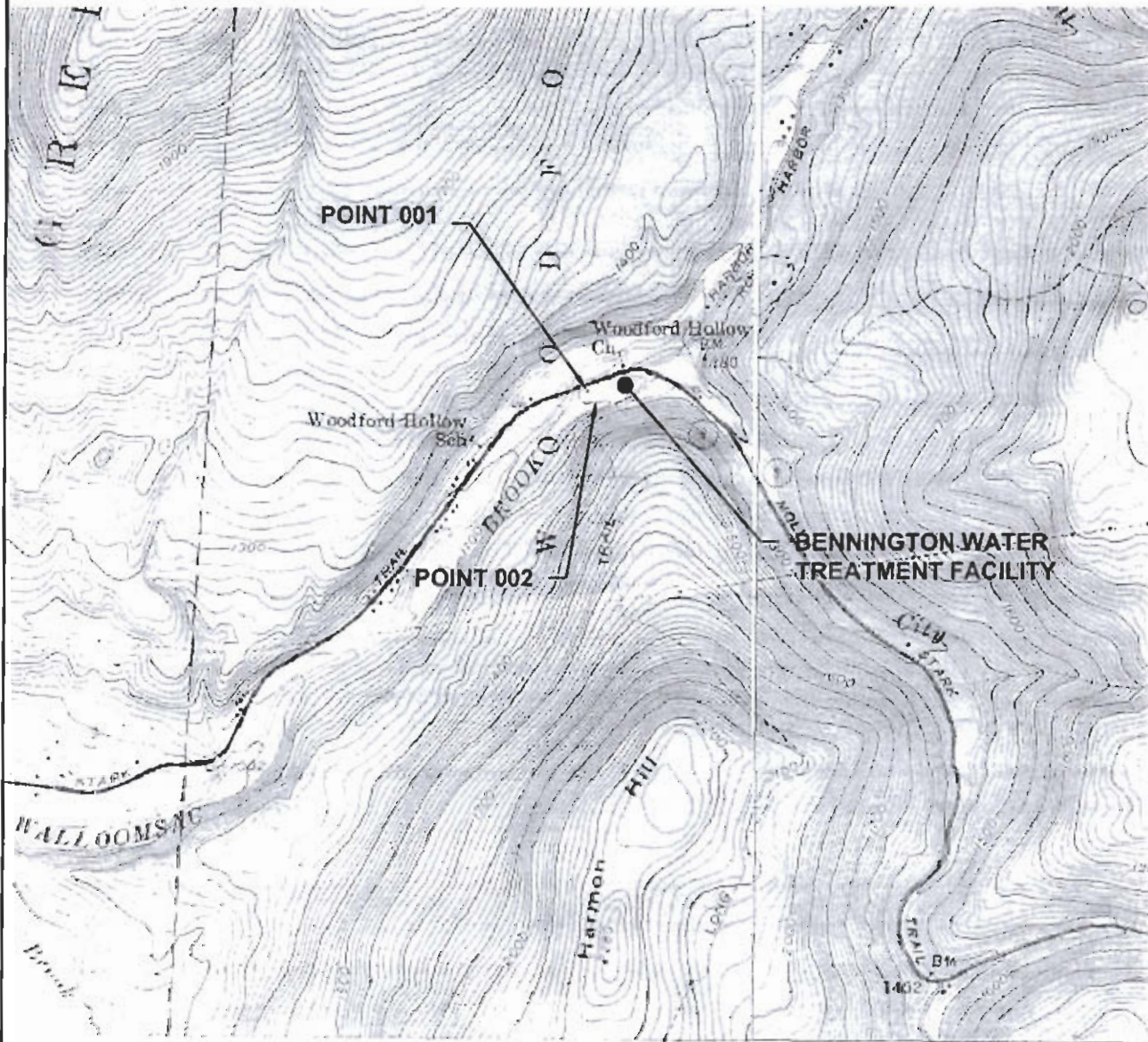
The Department will hold a hearing if there is significant public interest in holding such a hearing. Any public hearing brought in response to such a request or petition will be held in the geographical area of the proposed discharge or other appropriate area, at the discretion of the Department and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

the public hearing will be retained by the Department and considered in the formulation of the final determination to issue, deny, or modify the draft permit.

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

*No comments were received during the public notice period.*

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**FIGURE 1**  
**WATER TREATMENT FACILITY**  
**& INTAKE UPGRADE LOCATION OF**  
**PROPOSED DISCHARGE POINTS**  
**BENNINGTON, VERMONT**

PROJECT NO. 433007  
 PROJECT MFR. RAW  
 SCALE AS SHOWN  
 DATE OCT 28, 2003  
 DRAWING NO. F-1