

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"),

The Town of Northumberland

is authorized to discharge from the Wastewater Treatment Plant located at

**Northumberland Village Water Pollution Control Facility
Route 3 South
Northumberland, New Hampshire 03582**

to receiving water named

Connecticut River (Hydrologic Basin Code 01080101)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the date of signature.

This permit and the authorization to discharge expires at midnight on August 31, 2011.

This permit supersedes the permit issued on July 30, 1984.

This permit consists of Part I (7 pages) including effluent limitations and monitoring requirements; EPA Region I NPDES Permit Sludge Compliance Guidance; and Part II including General Conditions and Definitions.

Signed this 28th day of SEPTEMBER, 2006

/s/ SIGNATURE ON FILE

Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency (EPA)
Region I
Boston, Massachusetts

PART I.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 001 sanitary wastewater effluent into the Connecticut River. Such discharges shall be limited and monitored by the permittee as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken at a location that provides a representative analysis of the effluent.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>						<u>Monitoring Requirements</u>		
	<u>Average Monthly</u>	<u>Average Weekly (lb/day)</u>	<u>Maximum Daily</u>	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>	
Flow ¹ ; MGD	----	----	----	Report	----	Report	Continuous	Recorder	
BOD ₅	15.3	22.9	25.4	30 mg/l	45 mg/l	50 mg/l	1/Week ²	Grab	
TSS	15.3	22.9	25.4	30 mg/l	45 mg/l	50 mg/l	1/Week ²	Grab	
pH Range ³		6.5 to 8.0 Standard Units (See PART I.E.1.a.)						1/Day	Grab
Total Residual Chlorine	----	----	----	----	----	1.0 mg/l	1/Day	Grab	
<i>Escherichia coli</i> ⁴ ; Colonies/100 ml	----	----	----	126	----	406	3/Week	Grab	

(1) For a period of one year beginning on the effective date of this permit effluent flow may be measured by estimate. After one year from the effective date of this permit the effluent flow shall be measured and recorded using a flow meter and totalizer. In order to accurately calculate BOD₅ and TSS percent removals, both the influent and effluent flows shall be reported.

(2) To monitor 85 percent removal of BOD₅ and TSS required in Part I.A.3., the influent concentrations of both BOD₅ and TSS shall be monitored twice per month using a 24-hour composite sample and the results reported as average monthly values.

(3) State of New Hampshire certification requirement.

(4) The average monthly value for *Escherichia coli* shall be determined by calculating the geometric mean and the result reported. *Escherichia coli* shall be tested using test method 1103.1 found in *Escherichia coli* (E. Coli) in Water by Membrane Filtration Using membrane-Thermotolerant *Escherichia coli* Agar (mTec), EPA-821-R-02-020.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

1. The discharge shall not cause a violation of the water quality standards of the receiving water.
2. The discharge shall be adequately treated to insure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits, float as foam, debris, scum or other visible pollutants. It shall be adequately treated to insure that the surface waters remain free from pollutants which produce odor, color, taste or turbidity in the receiving waters which is not naturally occurring and would render it unsuitable for its designated uses.
3. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both BOD₅ and TSS. The percent removal shall be based on a comparison of average monthly influent concentration (based upon average monthly influent flow) versus average monthly effluent concentrations (based upon average monthly effluent flow).
4. Northumberland WPCF routinely exceeds 80 percent of design flow. When treatment necessary to achieve permit limits cannot be assured, the permittee may be required to submit plans for facility improvements.
5. All POTWs must provide adequate notice to both EPA and the New Hampshire Department of Environmental Services, Water Division (NHDES-WD) of the following:
 - a. Any new introduction of pollutants into the POTW from an indirect discharger in a primary industry category (see 40 CFR §122 Appendix A as amended) discharging process water; and
 - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - c. For purposes of this paragraph, adequate notice shall include information on:
 - (1) the quantity and quality of effluent introduced into the POTW; and
 - (2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
6. The permittee shall not discharge into the receiving water any pollutant or combination of pollutants in toxic amounts.
7. The permittee shall submit to EPA and NHDES-WD the name of any Industrial User (IU) subject to Categorical Pretreatment Standards (see list in 40 CFR §403 Appendix C as amended) pursuant to 40 CFR §403.6 and 40 CFR Chapter I, Subchapter N **who commences discharge to the POTW after the effective date of this permit.** This reporting requirement also applies to any other IU that discharges an average of 25,000 gallons per day or more of process wastewater into the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater) or contributes a process wastewater which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW.
8. In the event that the permittee receives reports (baseline monitoring reports, 90-day compliance reports, periodic reports on continued compliance, etc.) from Categorical Industrial Facilities (see list in 40 CFR §403 Appendix C as amended), the permittee shall forward all copies of these reports

B. SLUDGE CONDITIONS

1. The permittee shall comply with all existing federal and State laws and regulations that apply to sewage sludge use and disposal practices and with the Clean Water Act Section 405(d) technical standards.
2. The permittee shall comply with the more stringent of either State (ENV-Ws 800) or Federal (40 C.F.R. Part 503) requirements.
3. The technical standards (Part 503 regulations) apply to facilities which perform one or more of the following use or disposal practices:
 - a. Land Application - The use of sewage sludge to condition or fertilize soil.
 - b. Surface Disposal - The placement of sewage sludge in a sludge only landfill.
 - c. Fired in a sewage sludge incinerator.
4. The 40 C.F.R. Part 503 regulations do not apply to facilities that place sludge within a municipal solid waste landfill (MSWLF). Part 503 relies on 40 C.F.R. Part 258 criteria, which regulates landfill disposal, for sewage sludge disposal in a MSWLF. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit, but rather treat the sludge or are otherwise excluded under 40 C.F.R. Part 503.6.
5. The permittee shall use and comply with the attached Sludge Compliance Guidance document to determine appropriate conditions. Appropriate conditions contain the following elements:
 - a. General requirements
 - b. Pollutant limitations
 - c. Operational standards (pathogen and vector attraction reduction requirements)
 - d. Management practices
 - e. Record keeping
 - f. Monitoring
 - g. Reporting

Depending upon the quality of material produced by a facility, all conditions may not apply to the facility.

6. If the sludge disposal method requires monitoring, the Permittee shall monitor the pollutant concentrations, pathogen reduction, and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year.
 - a. Less than 290.....1/Year
 - b. 290 to less than 1,500.....1/Quarter
 - c. 1,500 to less than 15,000.....6/Year
 - d. 15,000 plus.....1/Month
7. The permittee shall perform all required sewage sludge sampling using the procedures detailed in 40 C.F.R. Part 503(h).

8. When the permittee is responsible for an annual report containing the information specified in the regulations, the report shall be submitted by February 19th of each year. Reports shall be submitted to the address contained in the reporting section of this permit.
9. Sludge monitoring is not required by the permittee when the permittee is not responsible for the ultimate sludge use or disposal or when sludge is disposed of in a MSWLF. The permittee must be assured that any third party contractor is in compliance with appropriate regulatory requirements. In such cases, the permittee is required only to submit an annual report by February 19th of each year containing the following information:
 - a. Name and address of the contractor responsible for sludge use and disposal.
 - b. Quantity of sludge in dry metric tons removed from the facility.

Reports shall be submitted to the address contained in the reporting section the this permit.

C. SPECIAL CONDITIONS

pH Limit Adjustment

The permittee may submit a written request to the EPA-New England requesting a change in the permitted pH limit range to be not less restrictive than 6.0 to 9.0 Standard Units found in the applicable National Effluent Limitation Guideline (Secondary Treatment Regulations in 40 CFR Part 133) for this facility. The permittee's written request must include the State's approval letter containing an original signature (no copies). The State's letter shall certify that the permittee has demonstrated to the State's satisfaction that as long as discharges to the receiving water from a specific outfall are within a specific numeric pH range the naturally occurring receiving water pH will be unaltered. That letter must specify for each outfall the associated numeric pH limit range. Until written notice is received by certified mail from the EPA-New England indicating the pH limit range has been changed, the permittee is required to meet the permitted pH limit range in the respective permit.

D. MONITORING AND REPORTING

Monitoring results shall be summarized for each calendar month and reported on separate Discharge Monitoring Report Form(s) (DMRs) postmarked no later than the 15th day of the month following the completed reporting period.

Signed and Dated original DMRs and all other reports required herein, shall be submitted to the Director at the following address:

U.S. Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114-8127

Duplicate signed copies (original signature) of all DMRs and all other reports or notifications required herein of in Part II shall be submitted to the State of New Hampshire at:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

All verbal reports required in Parts I and II of this permit shall be made to both EPA-New England and to NHDES-WD.

E. STATE PERMIT CONDITIONS

1. The permittee shall install an effluent flow meter within the first year of the effective date of this permit.
2. The permittee shall comply with the following conditions which are included as State Certification requirements.
 - a. The pH range of 6.5-8.0 Standard Units (S.U.) must be achieved in the final effluent unless the permittee can demonstrate to NHDES-WD: 1) that the range should be widened due to naturally occurring conditions in the receiving water or 2) that the naturally occurring receiving water pH is not significantly altered by the permittee's discharge. The scope of any demonstration project must receive prior approval from NHDES-WD. In no case, shall the above procedure result in pH limits outside of the range of 6.0 to 9.0 S.U., which is the federal effluent limitation guideline regulation for pH for secondary treatment and is found in 40 CFR §133.102(c).
 - b. Pursuant to State Law NH RSA 485-A:13 and the New Hampshire Code of Administrative Rules, Env-Ws 703.07 (b) and Env-Ws 904.08 the following submissions shall be made to the NHDES-WD by a municipality proposing to accept into its POTW (including sewers and interceptors):
 - (1) A Sewer Connection Permit request form:
 - (a) Any extension of a collector or interceptor, whether public or private, regardless of flow;
 - (b) Any wastewater connection or other discharge in excess of 5,000 gpd;
 - (c) Any wastewater connection or other discharge to a WWTP operating in excess of 80 percent design flow capacity based on actual average flow for 90 consecutive days;
 - (d) Any industrial wastewater connection or change in existing discharge of industrial wastewater, regardless of quality or quantity; and
 - (e) Any sewage pumping station greater than 50 gpm or serving more than one building.
 - (2) An "Industrial Wastewater Discharge Request Application" for new or increased loadings of industrial waste, in accordance with Env-Ws 904.10.
 - c. The permittee shall not at any time, either alone or in conjunction with any person or persons, cause directly or indirectly the discharge of waste into the said receiving water unless it has been treated in such a manner as will not lower the legislated water quality classification or interfere with the uses assigned to said water by the New Hampshire Legislature (RSA 485-A:12).
 - d. Any modifications of the Permittee's Sewer Use Ordinance, including local

limitations on pollutant concentrations, shall be submitted to the NHDES-WD for approval prior to adoption by the permittee.

- e. Within 90 days of the effective date of this permit, the permittee shall submit to NHDES-WD a copy of its current sewer use ordinance if it has been revised since any previously approved submittal.
- f. Within 120 days of the effective date of this permit, the permittee shall submit to NHDES-WD a current list of all industries discharging industrial waste to the municipal wastewater treatment plant. As a minimum, the list shall indicate the name and address of each industry, along with the following information: telephone number, contact person, products manufactured, industrial processes used, existing level of pretreatment, and list of existing industrial discharge permits with effective dates.

3. This NPDES Discharge Permit is issued by the EPA under Federal and State law. Upon final issuance by the EPA, the NHDES-WD may adopt this permit, including all terms and conditions, as a State permit pursuant to RSA 485-A:13.

Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of the Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation.