

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

Henniker Wastewater Treatment Facility

is authorized to discharge from the Wastewater Treatment Plant located at

**Ramsdell Road
Henniker, New Hampshire 03242**

to receiving water named

Contoocook River (Hydrologic Basin Code 01070003)

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

This permit will become effective sixty (60) days from the date of signature.

This permit and the authorization to discharge expires at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on September 15, 1999.

This permit consists of **Part I** (7 pages) including effluent limitations and monitoring requirements; **Attachment A** (Freshwater Acute Toxicity Test Procedure and Protocol, December 1995, 8 pages); and **27** pages in Part II including General Conditions and Definitions.

Signed this 28th day of February, 2006

/s/ SIGNATURE ON FILE

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

PART I.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- 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 Contoocook River. Such discharge 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.

Effluent Characteristic	Discharge Limitations			Monitoring Requirements				
	Average Monthly lbs/day	Average Weekly lbs/day	Maximum Daily lbs/day	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Flow; MGD	---	---	---	Report	---	Report	Continuous	Recorder ¹
BOD ₅	128	192	---	30 mg/l	45 mg/l	50 mg/l	2/Week ²	24-Hour Composite
TSS	128	192	213	30 mg/l	45 mg/l	50 mg/l	2/Week ²	24-Hour Composite
pH Range ³	---	---	---	126	---	406	1/Day	Grab
<i>Escherichia coli</i> ⁴ ; Colonies/100 ml	---	---	---	6.5 to 8.0 Standard Units (See PART I.E.1.a.)	---	---	3/Week	Grab
Whole Effluent Toxicity	---	---	---	---	---	---	---	---
LC50 ^{5,6,7} ; Percent Effluent Hardness, mg/L ⁸	---	---	---	---	---	100	1/Year	24-Hour Composite
Ammonia Nitrogen as Nitrogen ⁸ ; mg/l	---	---	---	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Aluminum ⁸ ; mg/l	---	---	---	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Cadmium ⁸ ; mg/l	---	---	---	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Chromium ⁸ ; mg/l	---	---	---	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Copper ⁸ ; mg/l	---	---	---	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Lead ⁸ ; mg/l	---	---	---	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Nickel ⁸ ; mg/l	---	---	---	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Zinc ⁸ ; mg/l	---	---	---	---	---	Report	1/Year ⁹	24-Hour Composite

NOTE: See page 3 for explanation of footnotes.

EXPLANATION OF SUPERSCRIPTS TO PART I.A.1 on page 2:

- (1) The effluent flow shall be continuously measured and recorded using a flow meter and totalizer.
- (2) To monitor the 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 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.
- (5) "LC50" is defined as the concentration of wastewater that causes mortality to 50 percent of the test organisms. The "100 percent" limit is defined as a sample which is composed of 100 percent effluent. Therefore, a 100 percent limit means that a sample of 100 percent effluent (no dilution) shall cause no greater than a 50 percent mortality rate in that effluent sample. The limit is considered to be a maximum daily limit.
- (6) The permittee shall conduct 48-hour static acute toxicity tests on effluent samples following the December 1995 Freshwater Acute Toxicity Test Procedure and Protocol (Attachment A). The two species for these tests are the Daphnid (Ceriodaphnia dubia) and the Fathead Minnow (Pimephales promelas).
- (7) This permit shall be modified, or alternatively, revoked and reissued to incorporate additional toxicity testing requirements, including chemical specific limits, if the results of these toxicity tests indicate the discharge causes an exceedance of any water-quality criterion. Results from these toxicity tests are considered "New Information" and the permit may be modified as provided in 40 Code of Federal Regulations (CFR) §122.62(a)(2).
- (8) For each Whole Effluent Toxicity test the permittee shall report on the appropriate Discharge Monitoring Report, (DMR), the concentrations of the Ammonia Nitrogen as Nitrogen, Hardness, and Total Recoverable Aluminum, Cadmium, Chromium, Copper, Lead, Nickel and Zinc found in the 100 percent effluent sample. All these aforementioned chemical parameters shall be determined to at least the Minimum Quantification Level shown in **Attachment A** on page A-7, or as amended. Also the permittee should note that all chemical parameter results must still be reported in the appropriate toxicity report.
- (9) Toxicity test samples shall be collected and tests completed during the calendar quarter beginning September 1st and ending November 30th each year. Toxicity test results are to be submitted by the 15th day of the month following the end of the quarter sampled.

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 versus effluent concentrations.
4. When the effluent discharged for a period of 3 consecutive months exceeds 80 percent of the 0.51 MGD design flow or 0.41 MGD, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans. Before the design flow will be reached, or whenever 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, or is designated as such by the Approval Authority as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).
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 within ninety (90) days of their receipt to EPA and NHDES-WD.

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 CWA Section 405(d) technical standards.
2. The permittee shall comply with the more stringent of either the state (Env-Ws 800) or federal (40 CFR Part 503) requirements.
3. The requirements and technical standards of 40 CFR Part 503 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 the soil.
 - b. Surface disposal - the placement of sewage sludge in a sludge only landfill.
 - c. Placement of sludge in a municipal solid waste landfill (See 40 CFR Section 503.4).
 - d. Sewage sludge incineration in a sludge only incinerator.
4. The 40 CFR Part 503 conditions applying to facilities which place sludge within a municipal solid waste landfill stipulate that the sewage sludge meets the requirements of 40 CFR Part 258 concerning the quality of materials disposed in a municipal landfill. These conditions do not apply to facilities which do not dispose of sewage sludge during the life of the permit, but rather treat the sludge (lagoons-reed beds), or are otherwise excluded under 40 CFR Section 503.6.
5. The permittee shall submit an annual report as specified by February 19th. Reports shall be submitted to both addresses (EPA-New England and NHDES-WD) contained in the reporting section of the permit. Sludge monitoring is not required by the permittee when the permittee is not responsible for the ultimate sludge disposal. The permittee must be assured that any third party contractor is in compliance with appropriate regulatory requirements. In such case, the permittee is required to submit an annual report by February 19 containing the following information:
 - Name and address of contractor responsible for sludge disposal
 - Quantity of sludge in dry metric tons removed from the facility by the sludge contractor

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.

1. 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 of all reports required herein shall be submitted to the State at:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
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 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 706.08(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 for:
 - (a) Any proposed sewerage, whether public or private;
 - (b) Any proposed wastewater connection or other discharge in excess of

5,000 gallons per day;

- (c) Any proposed wastewater connection or other discharge to a wastewater treatment facility operating in excess of 80% design flow capacity; and
- (d) Any proposed connection or other discharge of industrial wastewater, regardless of quality or quantity.

(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.
2. 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.