

**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 Warner Village Water District

is authorized to discharge from the Wastewater Treatment Facility located at

**55 West Joppa Road
Warner, New Hampshire 03278**

to receiving water named

**Warner River
(Hydrologic Code; 01070003)**

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

This permit shall become effective on signature.

This permit and the authorization to discharge expire at midnight on November 30, 2011.

This permit supersedes the permit issued on June 21, 2001, and subsequently modified on February 11, 2003.

This permit consists of 11 pages in Part I including effluent limitations and monitoring requirements: Attachment A (9 pages); 72 pages of Sludge Compliance Guidance and 25 pages in Part II including General Conditions and Definitions.

Signed this 22nd day of December, 2006

/s/ SIGNATURE ON FILE

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

PART 1.A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of the permit the Permittee is authorized to discharge treated sanitary waste waters from outfall Serial Number 001 into the Warner 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 the end of all processes, including disinfection and dechlorination or at an alternative representative location, approved by the EPA and NHDES.

Effluent Parameter	Effluent Limit			Monitoring Requirement	
	Average Monthly	Average Weekly	Maximum Daily	Frequency	Sample Type
Flow, MGD	Report	---	Report	Continuous	Recorder ¹
BOD₅; mg/l (lbs/day)	30 (27.5)	45 (41.3)	50 (45.9)	2/Week ²	24-Hour Composite
TSS; mg/l (lbs/day)	30 (27.5)	45 (41.3)	50 (45.9)	2/Week ²	24-Hour Composite
pH Range³; Standard Units	6.5 to 8.0 (See Section I.D.1.a.)			1/Day	Grab
Escherichia Coli⁴; Colonies/100 ml	126	---	406	3/Week	Grab
Total Residual Chlorine⁵; mg/l	0.26	---	0.45	1/Day	Grab

Effluent Parameter	Effluent Limit			Monitoring Requirement	
	Average Monthly	Average Weekly	Maximum Daily	Frequency	Sample Type
Whole Effluent Toxicity LC50^{6,7,8}; Percent Effluent	≥100			1/Year	24-Hour Composite
Ammonia Nitrogen as N⁹; mg/l	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Cadmium⁹; mg/l	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Chromium⁹; mg/l	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Copper⁹; mg/l	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Lead⁹; mg/l	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Nickel⁹; mg/l	---	---	Report	1/Year	24-Hour Composite
Total Recoverable Zinc⁹; mg/l	---	---	Report	1/Year	24-Hour Composite

(Note: See page 3 for footnotes)

FOOTNOTES TO PART I.A.1 ON PAGES 2 AND 3

1. The effluent flow shall be continuously measured and recorded using a flow meter and totalizer.
2. The influent concentrations of both BOD₅ and TSS shall be monitored twice per month (2/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. *Escherichia coli* shall be tested using test method 1103.1. found in *Test Methods for Escherichia coli in Water by Membrane Filter Procedure*, EPA-600/4-85/076 as amended by test method 9213 D.3. found in *Standard Methods for the Examination of Water and Wastewater*, 19th or subsequent Edition(s) as approved in 40 CFR Part 136. *Escherichia coli* monitoring shall be conducted concurrently with a total residual chlorine sample.
5. Total Residual Chlorine shall be measured using any one of the following three methods listed in a. through c.:
 - a. DPD spectrophotometric (colorimetric): EPA No. 330.5 or *Standard Methods* [18th or subsequent Edition(s) as approved in 40 CFR Part 136], No. 4500-Cl G.
 - b. DPD titrimetric (ferrous titrimetric) EPA No. 330.4 or *Standard Methods* [18th or subsequent Edition(s) as approved in 40 CFR Part 136], No. 4500-Cl F.
 - c. Amperometric titration EPA No. 330.1 or *Standard Methods* [18th or subsequent Edition(s) as approved in 40 CFR Part 136], No. 4500-Cl D or ASTM No. D1253-86(92).
6. LC50 is the concentration of wastewater (effluent) causing mortality to 50 percent (%) of the test organisms. The "100% limit" is defined as a sample which is composed of 100% effluent (See A.1.a. of Part 1 and Attachment A of Part 1). Therefore, a 100% limit means that a sample of 100% effluent shall cause no greater than a 50% mortality rate in that effluent sample.
7. The Permittee shall conduct a 48-hour acute survival toxicity test using the Daphnid (*Ceriodaphnia dubia*) and the Fathead Minnow (*Pimephales promelas*) on effluent samples following the protocol in Attachment A (Freshwater Acute Toxicity Test Procedure and Protocol dated December 1995). Toxicity test samples shall be collected and the test completed during the calendar quarter ending September 30th. Toxicity test results are to be submitted by October 15th.

8. This permit shall be modified, or alternatively, revoked and reissued to incorporate additional toxicity testing requirements, including chemical specific limits, if the results of the WET tests indicate the discharge exceeds any State water quality criterion. Results from these toxicity tests are considered "New Information" and the permit may be modified as provided in 40 CFR Section 122.62(a)(2).
9. For each WET test the Permittee shall report on the appropriate Discharge Monitoring Report (DMR) the concentrations of 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 (MLs) shown in Attachment A on page A-7, or as amended. The Permittee should also note that all chemical parameter results must still be reported in the appropriate WET test toxicity report.

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 Permittee shall not discharge into the receiving water any pollutant or combination of pollutants in toxic amounts. 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 0.11 MGD design flow (0.088 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. A User may not introduce into any Publicly Owned Treatment Works (POTWs) any pollutant(s) which cause Pass Through or Interfere with the operation or performance of the POTW. The terms User, Pass Through and Interference are defined in 40 CFR §403.3.

6. All POTWs must provide adequate notice to both EPA and the New Hampshire Department of Environmental Services, Water Division (NHDES-WD) of the following:
7. 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
 - a. 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
 - b. 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.
8. The Permittee shall submit to EPA and NHDES-WD the name of any Industrial User (IU) who commences discharge to the POTW after the effective date of this permit:
 - a. That are subject to Categorical Pretreatment Standards (see list in 40 CFR §403 Appendix C as amended) pursuant 40 CFR §406.3 and 40 CFR Chapter I, Subchapter N.
 - b. That discharges an average of 25,000 gallons per day or more of process wastewater into the POTW (excluding sanitary, non-contact cooling and boiler blow-down wastewater)
 - c. That contributes a process wastewater which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW.
 - d. That is designated as an IU by the Control Authority as defined in 40 CFR §403.12(a) on the basis that the industrial user has a reasonable potential to adversely affect the waste water treatment facility's operation, or violate any pretreatment standard or requirement in accordance with 40 CFR §403.8(f)(6).
9. 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. UNAUTHORIZED DISCHARGES

The permit only authorizes discharges in accordance with the terms and conditions of this permit and only from the outfall listed in Part I A.1. of this permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) are not authorized by this permit and shall be reported in accordance with Part II, Section D.1.e. (1) of the General Requirements of this permit (Twenty-four hour reporting).

C. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the following terms and conditions. The Permittee is required to complete the following activities for the collection system which it owns:

1. Maintenance Staff

The Permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Preventative Maintenance Program

The Permittee shall maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges.

3. Infiltration/Inflow

The Permittee shall control infiltration and inflow into its sewer systems as necessary to prevent high flow-related unauthorized discharges from its collection system and high flow-related violations of the wastewater treatment plant's effluent limitations.

The Permittee shall each submit a summary report of all actions taken to minimize Infiltration/Inflow (I/I) during the previous calendar year to EPA and the NHDES by **February 28th of each year**. The report shall also include a summary of unauthorized discharges during the previous calendar year which were caused by inadequate sewer system capacity, excessive I/I and operational/maintenance problems, including a status of action items necessary to eliminate the discharges. The information reported shall include the date, location, duration and volume of discharge as well as the cause of the overflow and the receiving water.

D. ALTERNATE POWER SOURCE

In order to maintain compliance with the terms and conditions of this permit, the Permittee shall provide an alternate power source with which to sufficiently operate its publicly owned treatment works, as defined at 40 CFR §122.2, which references the definition at 40 CFR 403.3(o).

E. 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 (CWA) Section 405(d) technical standards.
2. The Permittee shall comply with the more stringent of either State (Env-Ws 800) or Federal (40 CFR 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 the soil.
 - b. Surface disposal - the placement of sewage sludge in a sludge only landfill.
 - c. Fired in a sewage sludge incinerator.
4. The 40 CFR Part 503 conditions do not apply to facilities that place sludge within a municipal solid waste landfill (MSWLF). Part 503 relies on 40 Part 248 criteria, which regulates landfill disposal, for sewage sludge disposed 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 (lagoons-reed beds), or are otherwise excluded under 40 CFR Part 503.6.
5. The Permittee shall submit an annual report containing the information specified in the attached Sludge Compliance Guidance document. Reports are due annually by February 19th. Reports shall be submitted to the addresses (EPA and NHDES-WD) contained in the reporting section of the permit.
6. Sludge monitoring is not required by the Permittee when the Permittee is not responsible for the ultimate sludge use or disposal or when the 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.

F. 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 or notifications required herein or in Part II 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 written reports or notifications required herein or in Part II shall be submitted to the State at:

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

All verbal reports or notifications shall be made to both EPA and NHDES.

G. STATE PERMIT CONDITIONS

1. The Permittee shall comply with the following conditions which are included as State Certifications 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 the range of 6.0-9.0 S.U., which is the federal effluent limitation guideline regulation for pH for secondary treatment and is found in 40 C.F.R. §133.102(c).
 - b. Pursuant to State Law NH RSA 485-A:13 and the New Hampshire Code of Administrative Rules, Env-Wq 703.07(a) 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) An "Application for Sewer Connection Permit" for any proposal to construct or modify any of the following:
 - (i) Any extension of a collector or interceptor, whether public or private, regardless of flow;
 - (ii) Any wastewater connection or other discharge in excess of 5,000 gpd;
 - (iii) Any wastewater connection or other discharge to a wastewater treatment facility operating in excess of 80 percent design flow capacity for 3 consecutive months;
 - (iv) Any industrial wastewater connection or change in existing discharge of industrial wastewater, regardless of quality or quantity; and
 - (v) 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.

H. SPECIAL CONDITION

1. pH Limit Adjustment

- a. The Permittee may submit a written request to the EPA 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 C.F.R. Part 133) for this facility. The Permittee's written request must include the State's letter containing an original signature (no copies). The State's approval letter shall state 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. The letter must specify for each outfall the associated numeric pH limit range. Until written notice is received by certified mail from the EPA indicating the pH limit range has been changed, the Permittee is required to meet the permitted pH limit range in the respective permit.