

**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"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

**City of Northampton
Board of Public Works**

is authorized to discharge from the facility located at

**Northampton Wastewater Treatment Plant
33 Hockanum Road
Northampton, MA 01060**

to receiving water named

Connecticut River (Connecticut River Watershed – MA34-04E)

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

This permit shall become effective December 1, 2008.

This permit and the authorization to discharge expire at midnight, November 30, 2013.

This permit supersedes the permit issued on May 23, 2002 and expired September 30, 2005.

The Town of Williamsburg is a co-permittee for Part 1.B., Unauthorized Discharges, and Part 1.C., Operation and Maintenance of the Sewer System, which includes conditions pertaining to the collection system owned and operated by Williamsburg. The responsible Town authority is:

**Williamsburg Water and Sewer Commission
P. O. Box 447/141 Main St.
Haydenville, MA 01039**

This permit consists of 15 pages in Part I including effluent limitations, monitoring requirements, Attachment A (Freshwater Acute WET Protocol), Attachment B (Pretreatment Reassessment Form), Attachment C (Pretreatment Annual Report), and 25 pages in Part II including Standards Conditions and Definitions.

Signed this 30th day of September, 2008

/S/ SIGNATURE ON FILE

Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

Part I.A.

1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge treated effluent from outfalls **001 and 002*** to the Connecticut River and Old Mill River respectively. Such discharge shall be limited and monitored by the permittee as specified below.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS						MONITORING REQUIREMENTS	
	Mass Limits			Concentration Limits				
PARAMETER	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	MEASUREMENT FREQUENCY	SAMPLE TYPE ³
FLOW ¹	***	***	***	8.6 MGD	***	Report MGD	CONTINUOUS	RECORDER
FLOW ¹	***	***	***	Report MGD	***	Report MGD	CONTINUOUS	RECORDER
BOD ₅ ²	2152 lbs/Day 978 kgs/Day	3228 lbs/Day 1467 kgs/Day	Report	30 mg/l	45 mg/l	Report mg/l	2/WEEK	24-HOUR COMPOSITE ⁴
TSS ²	2152 lbs/Day 978 kgs/Day	3228 lbs/Day 1467 kgs/Day	Report	30 mg/l	45 mg/l	Report mg/l	2/WEEK	24-HOUR COMPOSITE ⁴
pH RANGE ⁵	6.0 - 8.3 SU SEE PERMIT PAGE 6 OF 15, PARAGRAPH I.A.2.b						1/DAY	GRAB
FECAL COLIFORM ^{5,6} (April 1- October 31)	***	***	***	200 cfu/100 ml	***	400 cfu/100 ml	2/WEEK	GRAB
<i>E. coli</i> ^{5,6} (April 1- October 31)	***	***	***	126 cfu/100 ml	***	409 cfu/100 ml	2/WEEK	GRAB
CHLORINE, TOTAL RESIDUAL ^{6,7} (April 1- October 31)	***	***	***	1.0 mg/l	***	1.0 mg/l	1/DAY (when in use)	GRAB

* Discharges through Outfall 002 are comprised of flow diverted after the last treatment process, but prior to pumps serving Outfall 001. The sampling locations specified in Footnote 3 (found on Page 4 of this permit) are representative of both outfalls, therefore, additional sampling will not be required at Outfall 002 except: The permittee shall report with each monthly Discharge Monitoring Report, the date(s) of each Outfall 002 activation and the estimated flow from Outfall 002 on such dates.

Part I.A. Continued

PARAMETER	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	AVERAGE MONTHLY	AVERAGE WEEKLY	MAXIMUM DAILY	MEASUREMENT FREQUENCY	SAMPLE TYPE ³
TOTAL NITROGEN ⁸	Report lbs/Day	***	Report lbs/Day	Report mg/l	***	Report mg/l	1/Week	24-HOUR COMPOSITE ⁴
TOTAL NITRITE + NITRATE	***	***	***	Report mg/l	***	Report mg/l	1/Week	24-HOUR COMPOSITE ⁴
TOTAL KJELDAHL NITROGEN	***	***	***	Report mg/l	***	Report mg/l	1/Week	24-HOUR COMPOSITE ⁴
TOTAL NITROGEN ⁸ (influent)	Report lbs/Day	***	Report lbs/Day	Report mg/l	***	Report mg/l	1/Week	24-HOUR COMPOSITE ⁴
TOTAL NITRITE + NITRATE (Influent)	***	***	***	Report mg/l	***	Report mg/l	1/Week	24-HOUR COMPOSITE ⁴
TOTAL KJELDAHL NITROGEN (Influent)	***	***	***	Report mg/l	***	Report mg/l	1/Week	24-HOUR COMPOSITE ⁴
TOTAL AMMONIA AS N	***	***	***	Report mg/l	***	Report mg/l	1/Week	24-HOUR COMPOSITE ⁴
WET ^{9, 10, 11}	ACUTE LC ₅₀ ≥ 50%						2/YEAR	24-HOUR COMPOSITE ⁴

Footnotes:

1. Report annual average, monthly average, and the maximum daily flow. The limit is an annual average, which shall be reported as a rolling average. The value will be calculated as the arithmetic mean of the monthly average flow for the reporting month and the monthly average flows of the previous eleven months.
2. Sampling required for influent and effluent.
3. A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of the week each month. Occasional deviations from the routine sampling program are allowed, but the reason for the deviation shall be documented in correspondence appended to the applicable discharge monitoring report.

All samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. All samples shall be 24 hour composites unless specified as a grab sample in 40 CFR §136.

All required effluent samples shall be collected at the point specified herein. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP	
PARAMETER	SAMPLE LOCATION
FLOW	Recorder in the Parshall Flume Calculate flow for Outfall 002 each activation day and report with the monthly Discharge Monitoring Report
BOD ₅ and TSS	Between Parshall Flume and Comminutor (Influent) Plant Water Line before strainer (Effluent)
pH RANGE, FECAL COLIFORM, <i>E.-COLI</i> , CHLORINE RESIDUAL, TOTAL AMMONIA AS N, TOTAL KJELDAHL NITROGEN, TOTAL NITRITE, TOTAL NITRATE and WHOLE EFFLUENT TOXICITY	Plant Water Line before strainer WET Dilution Water: Dirt road across from corn field on West bank of the CT River - (42 18' 13.709" N/72 36' 23.649"W)

4. 24-hour composite samples will consist of at least twenty four (24) grab samples taken during one consecutive 24 hour period, either collected at equal intervals and combined proportional to flow or continuously collected proportionally to flow.
5. Required for State Certification.

6. The average monthly limits for fecal coliform and *E. coli* are expressed as geometric means. Fecal coliform sampling and *E. coli* sampling shall be done concurrently.

The fecal coliform limits and monitoring requirements shall end one year after the effective date of this permit.

The *E. coli* limits shall go into effect one year after the effective date of this permit; the monitoring requirements go into effect upon the effective date of the permit.

A total residual chlorine sample shall be taken at the same time as *E. coli* and fecal coliform samples.

7. The chlorination system shall have alarm(s) to indicate system interruptions or malfunctions. Any interruption or malfunction of the chlorine dosing system that may result in inadequate disinfection or excessive levels of chlorine in the final effluent shall be reported with the monthly DMRs. The report shall include the date and time of the interruption or malfunction, the nature of the problem, and the estimated amount of time that the reduced/excessive levels of chlorine occurred. Also, the permittee must address steps taken to prevent future malfunctions of the same nature.

Whenever more than one grab sample is taken per day, the monthly DMR shall include an attachment documenting the individual grab sample results for that day, including the date and time of each sample, and a summary of any operational modifications implemented in response to sample results. All test results shall be used in the calculation and reporting of the monthly average and maximum daily data submitted on the DMR (see Part II. Section D.1.d.(2)).

8. See Part I.F, Special Conditions, for requirements to evaluate and implement optimization of nitrogen removal.
9. The permittee shall conduct acute toxicity tests two (2) times per year using a single species, the daphid, Ceriodaphnia dubia. Toxicity test samples shall be collected during the months of June and September. The test results shall be submitted by the last day of the month following the completion of the test. The results are due by July 31 and October 31, respectively. The permittee shall collect the samples during same week of each month for the duration of the permit. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Dates	Submit Results By:	Test Species	Acute Limit LC ₅₀
June September	July 31 October 31	<u>Ceriodaphnia dubia</u>	≥ 50%

10. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 50% limit means that a sample of 50% effluent shall cause no more than a 50% mortality rate.
11. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlined in **Attachment A, Section IV, DILUTION WATER** in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required in **Attachment A**, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance document is revoked, the permittee shall revert to obtaining approval as outlined in **Attachment A**. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in **Attachment A**.

Part I.A.

2.
 - a. The discharge shall not cause a violation of the water quality standards of the receiving waters.
 - b. The pH of the effluent shall not be less than 6.0 nor greater than 8.3 standard units, at any time.
 - c. The discharge shall not cause objectionable discoloration of the receiving waters.
 - d. The effluent shall contain neither visible oil sheen, foam, nor floating solids at any time.
 - e. The permittee's treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values.
 - f. The results of sampling for any parameter done in accordance with EPA approved methods above its required frequency must also be reported.
 - g. The permittee shall minimize the use of chlorine while maintaining adequate bacterial control.

Part I.B. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfalls 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 Section D.1.e.(1) of the General Requirements of this permit (Twenty-four hour reporting). [Note: SSO Reporting Form (which includes MassDEP Regional Office telephone numbers) for submittal of written report to MassDEP is available on-line at <http://www.mass.gov/dep/water/approvals/surffms.htm#sso>.]

Part I.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:

1. Maintenance Staff

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

3. Infiltration/Inflow Control Plan:

The permittee and co-permittee shall each develop and implement a plan to control infiltration and inflow (I/I) to its separate sewer system. The plan shall be submitted to EPA and MassDEP within six months of the effective date of this permit (see page 1 of this permit for the effective date) and shall describe the program for preventing infiltration/inflow related effluent limit violations, and all unauthorized discharges of wastewater, including overflows and by-passes due to excessive infiltration/inflow.

The plan shall include:

- An ongoing program to identify and remove sources of infiltration and inflow. The program shall include the necessary funding level and the source(s) of funding.

- An inflow identification and control program that focuses on the disconnection and redirection of illegal sump pumps and roof down spouts. Priority should be given to removal of public and private inflow sources that are upstream from, and potentially contribute to, known areas of sewer system backups and/or overflows.
- Identification and prioritization of areas that will provide increased aquifer recharge as the result of reduction/elimination of infiltration and inflow to the system.
- An educational public outreach program for all aspects of I/I control, particularly private inflow.

Reporting Requirements:

A summary report of all actions taken to minimize I/I during the previous calendar year shall be submitted to EPA and the MassDEP annually, by March 31. The summary report shall, at a minimum, include:

- A map and a description of inspection and maintenance activities conducted and corrective actions taken during the previous year.
- Expenditures for any infiltration/inflow related maintenance activities and corrective actions taken during the previous year.
- A map with areas identified for I/I-related investigation/action in the coming year.
- A calculation of the annual average I/I and the maximum month I/I for the reporting year.
- A report of any infiltration/inflow related corrective actions taken as a result of unauthorized discharges reported pursuant to 314 CMR 3.19(20) and reported pursuant to the Unauthorized Discharges section of this permit.

4. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall continue to provide an alternative power source with which to sufficiently operate its treatment works (as defined at 40 CFR §122.2).

Part I.D. INDUSTRIAL PRETREATMENT PROGRAM

1. Limitations for Industrial Users

The permittee shall develop and enforce specific effluent limits (local limits) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW Treatment Plant's Facilities or operation, are necessary to ensure continued compliance with the POTW's NPDES permit or sludge use or disposal practices. Specific local limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond. Within 120 days of the effective date of this permit, the permittee shall prepare and submit a written technical evaluation to the EPA analyzing the need to revise local limits. As part of this evaluation, the permittee shall assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, biomonitoring results, activated sludge inhibition, worker health and safety and collection system concerns.

In preparing this evaluation, the permittee shall complete and submit the attached form (Attachment B) with the technical evaluation to assist in determining whether existing local limits need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report. Should the evaluation reveal the need to revise local limits, the permittee shall complete the revisions within 120 days of notification by EPA and submit the revisions to EPA for approval. The Permittee shall carry out the local limits revisions in accordance with EPA's Local Limit Development Guidance (July 2004).

2. Industrial Pretreatment Program

The permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, 40 CFR 403. At a minimum, the permittee must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):

- a. Carry out inspection, surveillance, and monitoring procedures which will determine independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users shall be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year. Adequate records of these actions shall be maintained.

- b. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.
 - c. Obtain appropriate remedies for noncompliance by any industrial user with any pretreatment standard and/or requirement.
 - d. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.
3. The permittee shall provide the EPA and MassDEP with an annual report describing the permittee's pretreatment program activities for the twelve month period ending 60 days prior to the due date in accordance with 40 CFR 403.12(i). The annual report shall be consistent with the format described in Attachment C of this permit and shall be submitted no later than March 1 of each year.
 4. The permittee must obtain approval from EPA prior to making any significant changes to the industrial pretreatment program in accordance with 40 CFR 403.18(c).
 5. The permittee must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the Federal Regulations at 40 CFR 405 et. seq.
 6. The permittee must modify its pretreatment program, if applicable, to conform to all changes in the Federal Regulations that pertain to the implementation and enforcement of the industrial pretreatment program. The permittee must provide EPA, in writing, within 180 days of this permit's effective date proposed changes, if applicable, to the permittee's pretreatment program deemed necessary to assure conformity with current Federal Regulations.

At a minimum, the permittee must address in its written submission the following areas: (1) proposed changes to the enforcement response plan and (2) recent revisions to the sewer use ordinances. The permittee will implement these proposed changes pending EPA Region I's approval under 40 CFR 403.18. This submission is separate and distinct from any local limits analysis submission described in Part I.B.1.

7. On October 14, 2005 EPA published in the Federal Register final changes to the General Pretreatment Regulations. The final "Pretreatment Streamlining Rule" is designed to reduce the burden to industrial users and provide regulatory flexibility in technical and administrative requirements of industrial users and POTWs.

Within 90 days of the effective date of this permit, the permittee must submit to EPA all required modifications of the Streamlining Rule in order to be consistent with the provisions of the newly promulgated Rule. To the extent that the POTW legal authority is not consistent with the required changes, they must be revised and submitted to EPA for review.

Part I.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 CWA Section 405(d) technical standards.
2. The permittee shall comply with the more stringent of either the state 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. Sewage sludge incineration in a sludge-only incinerator
4. The 40 CFR part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. 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 (e.g. lagoons- reed beds), or are otherwise excluded under 40 CFR 503.6.
5. The permittee shall use and comply with the attached compliance guidance document to determine appropriate conditions. Appropriate conditions contain the following elements:
 - General requirements
 - Pollutant limitations
 - Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)
 - Management practices
 - Record keeping
 - Monitoring
 - Reporting

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

6. 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:

Less than 290	1/ year
290 to less than 1500	1 /quarter
1500 to less than 15000	6 /year
15000 +	1 /month

7. The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR 503.8.
8. The permittee shall submit an annual report containing the information specified in the guidance by **February 19**. Reports shall be submitted to the address 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 only 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

Part I.F. SPECIAL CONDITION

Within **one year of the effective date of the permit**, the permittee shall complete an evaluation of alternative methods of operating the existing wastewater treatment facility to optimize the removal of nitrogen, and submit a report to EPA and MassDEP documenting this evaluation and presenting a description of recommended operational changes. The methods to be evaluated include, but are not limited to, operational changes designed to enhance nitrification (seasonal and year round), incorporation of anoxic zones, septage receiving policies and procedures, and side stream management. The permittee shall implement the recommended operational changes in order to maintain the existing mass discharge loading of total nitrogen. The annual average total nitrogen load from this facility (2004 – 2005) is estimated to be 811 lbs/day.

The permittee shall also submit an annual report to EPA and MassDEP, **by February 1 each year**, that summarizes activities related to optimizing nitrogen removal efficiencies, documents the annual nitrogen discharge load from the facility, and tracks trends relative to the previous year.

Part I.G. MONITORING AND REPORTING

1. Reporting

Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked no later than the **15th day of the following month.**

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

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

The State Agency is:

Massachusetts Department of Environmental Protection
Western Regional Office - Bureau of Resource Protection
436 Dwight Street
Springfield, Massachusetts 01103

Signed and dated Discharge Monitoring Report Forms and toxicity test reports required by this permit shall also be submitted to the State at:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

Any Pretreatment reports required to be submitted in Section I.D, "Industrial Pretreatment Program" shall be sent to EPA and the State at:

EPA New England
Attn: Justin Pimpare
One Congress Street
Suite 1100 - CMU
Boston, MA 02114

and

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
Industrial Wastewater Section
1 Winter Street
Boston, MA 02108

Part I.H. STATE PERMIT CONDITIONS

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, §43.

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 this permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of Federal law, this permit shall remain in full force and effect under State law as a permit issued by the Commonwealth of Massachusetts.

**PERMIT ATTACHMENT B
REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS
(TBLLs)**

POTW Name & Address:

NPDES PERMIT # :

Date EPA approved current TBLLs :

Date EPA approved current Sewer Use Ordinance :

ITEM I.

In Column (1) list the conditions that existed when your current TBLLs were calculated. In Column (2), list current conditions or expected conditions at your POTW.		
	Column (1) EXISTING TBLLs	Column (2) PRESENT CONDITIONS
POTW Flow (MGD)		
Dilution Ratio or 7Q10 (from NPDES Permit)		
SIU Flow (MGD)		
Safety Factor		N/A
Biosolids Disposal Method(s)		

ITEM II.

EXISTING TBLLs			
POLLUTANT	NUMERICAL LIMIT (mg/l) or (lb/day)	POLLUTANT	NUMERICAL LIMIT (mg/l) or (lb/day)

ITEM III.

Note how your existing TBLLs, listed in Item II., are allocated to your Significant Industrial Users (SIUs), i.e. uniform concentration, contributory flow, mass proportioning, other. Please specify by circling.

ITEM IV.

Has your POTW experienced any upsets, inhibition, interference or pass-through from industrial sources since your existing TBLLs were calculated?

If yes, explain.

Has your POTW violated any of its NPDES permit limits and/or toxicity test requirements?

If yes, explain.

ITEM V.

Using current POTW influent sampling data fill in Column (1). In Column (2), list your Maximum Allowable Industrial Headwork Loading (MAIHL) values used to derive your TBLLs listed in Item II. In addition, please note the Environmental Criteria for which each MAIHL value was established, i.e. water quality, sludge, NPDES etc.

Pollutant	Column (1) Influent Data Analyses		Column (2) MAHL Values (lb/day)	Criteria
	Maximum (lb/day)	Average (lb/day)		
Arsenic				
Cadmium				
Chromium				
Copper				
Cyanide				
Lead				
Mercury				
Nickel				
Silver				
Zinc				
Other (List)				

ITEM VI.

Using current POTW effluent sampling data, fill in Column (1). In Column (2A) list what the Water Quality Standards (Gold Book Criteria) were at the time your existing TBLLs were developed. List in Column (2B) current Gold Book values multiplied by the dilution ratio used in your new/reissued NPDES permit.

Pollutant	Column (1)		Columns (2A) (2B)	
	Effluent Data Maximum (ug/l)	Analyses Average (ug/l)	Water Quality Criteria (Gold Book) From TBLLs (ug/l)	Today (ug/l)
Arsenic				
*Cadmium				
*Chromium				
*Copper				
Cyanide				
*Lead				
Mercury				
*Nickel				
Silver				
*Zinc				
Other (List)				

*Hardness Dependent (mg/l - CaCO3)

ITEM VII.

In Column (1), identify all pollutants limited in your new/reissued NPDES permit. In Column (2), identify all pollutants that were limited in your old/expired NPDES permit.			
Column (1) NEW PERMIT		Column (2) OLD PERMIT	
Pollutants	Limitations (ug/l)	Pollutants	Limitations (ug/l)

ITEM VIII.

<p>Using current POTW biosolids data, fill in Column (1). In Column (2A), list the biosolids criteria that was used at the time your existing TBLLs were calculated. If your POTW is planing on managing its biosolids differently, list in Column (2B) what your new biosolids criteria would be and method of disposal.</p>			
<p align="center">Column (1) Pollutant Biosolids Data Analyses</p>		<p align="center">Columns (2A) Biosolids Criteria (2B)</p>	
	<p>Average (mg/kg)</p>	<p>From TBLLs (mg/kg)</p>	<p>New (mg/kg)</p>
Arsenic			
Cadmium			
Chromium			
Copper			
Cyanide			
Lead			
Mercury			
Nickel			
Silver			
Zinc			
Molybdenum			
Selenium			
Other (List)			

ATTACHMENT C
NPDES PERMIT REQUIREMENT
FOR
INDUSTRIAL PRETREATMENT ANNUAL REPORT

The information described below shall be included in the pretreatment program annual reports:

1. An updated list of all industrial users by category, as set forth in 40 C.F.R. 403.8(f)(2)(i), indicating compliance or noncompliance with the following:
 - baseline monitoring reporting requirements for newly promulgated industries
 - compliance status reporting requirements for newly promulgated industries
 - periodic (semi-annual) monitoring reporting requirements,
 - categorical standards, and
 - local limits;
2. A summary of compliance and enforcement activities during the preceding year, including the number of:
 - significant industrial users inspected by POTW (include inspection dates for each industrial user),
 - significant industrial users sampled by POTW (include sampling dates for each industrial user),
 - compliance schedules issued (include list of subject users),
 - written notices of violations issued (include list of subject users),
 - administrative orders issued (include list of subject users),
 - criminal or civil suits filed (include list of subject users) and,
 - penalties obtained (include list of subject users and penalty amounts);
3. A list of significantly violating industries required to be published in a local newspaper in accordance with 40 C.F.R. 403.8(f)(2)(vii);
4. A narrative description of program effectiveness including present and proposed changes to the program, such as funding, staffing, ordinances, regulations, rules and/or statutory authority;

5. A summary of all pollutant analytical results for influent, effluent, sludge and any toxicity or bioassay data from the wastewater treatment facility. The summary shall include a comparison of influent sampling results versus threshold inhibitory concentrations for Northampton's Wastewater Treatment System and effluent sampling results versus water quality standards. Such a comparison shall be based on the sampling program described in the paragraph below or any similar sampling program described in this Permit.

At a minimum, annual sampling and analysis of the influent and effluent of the Northampton Wastewater Treatment Plant shall be conducted for the following pollutants:

- | | |
|--------------------|-------------------|
| a.) Total Cadmium | f.) Total Nickel |
| b.) Total Chromium | g.) Total Silver |
| c.) Total Copper | h.) Total Zinc |
| d.) Total Lead | i.) Total Cyanide |
| e.) Total Mercury | .) Total Arsenic |

The sampling program shall consist of one 24-hour flow-proportioned composite and at least one grab sample that is representative of the flows received by the POTW. The composite shall consist of hourly flow-proportioned grab samples taken over a 24-hour period if the sample is collected manually or shall consist of a minimum of 48 samples collected at 30 minute intervals if an automated sampler is used. Cyanide shall be taken as a grab sample during the same period as the composite sample. Sampling and preservation shall be consistent with 40 CFR Part 136.

6. A detailed description of all interference and pass-through that occurred during the past year;
7. A thorough description of all investigations into interference and pass-through during the past year;
8. A description of monitoring, sewer inspections and evaluations which were done during the past year to detect interference and pass-through, specifying parameters and frequencies;
9. A description of actions being taken to reduce the incidence of significant violations by significant industrial users; and,
10. The date of the latest adoption of local limits and an indication as to whether or not the Town is under a State or Federal compliance schedule that includes steps to be taken to revise local limits.

Required Submissions

This table is a summary of the reports required to be submitted under this NPDES permit as an aid to the permittee(s). If there are any discrepancies between the permit and this summary, the permittee(s) shall follow the permit requirements.

Required Report	Date Due	Submitted to:
The permittee anticipates replacing chlorine disinfection with ultraviolet (UV) disinfection during the effective period of this permit. [Footnote 5]	The permittee shall provide thirty (30) days notice in writing to both EPA and MassDEP prior to switching over from chlorine to UV.	Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, MA 02114 <hr/> MassDEP Western Regional Office - Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103
Toxicity test samples shall be collected during the months of July and October. [Footnote 7]	The test results shall be submitted by the last day of the month following the completion of the test. The results are due by August 31 and November 30, respectively	Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, MA 02114 <hr/> MassDEP Division of Watershed Management Surface Water Discharge Permit Program 627 Main Street, 2 nd Floor Worcester, MA 01608
If the average annual flow in any calendar year exceeds 80% of the facility's design flow, the permittee shall submit a report to MassDEP.	By March 31 of the following calendar year.	MassDEP Western Regional Office - Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103
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 Section D.1.e.(1) of the General Requirements of this permit. [Part B]	Twenty-four hour reporting. SSO Reporting Form (which includes MassDEP Regional Office telephone numbers) for submittal of written report to MassDEP is available on-line at http://www.mass.gov/dep/water/approvals/surffms.htm#sso	Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, MA 02114 <hr/> MassDEP Western Regional Office - Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103

<p>A summary report of all actions taken to minimize I/I during the previous calendar year shall be submitted to EPA and the MassDEP [Part.C3]</p>	<p>Submit annually, by March 31.</p>	<p>Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, MA 02114</p> <p>MassDEP Western Regional Office - Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103</p> <p>MassDEP Division of Watershed Management Surface Water Discharge Permit Program 627 Main Street, 2nd Floor Worcester, MA 01608</p>
<p>The permittee shall submit an annual report containing the information specified in the Sludge Guidance. [Part.D.8]</p>	<p>By February 19, each year, the permittee shall submit the sludge report for the previous year.</p>	<p>Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, MA 02114</p> <p>MassDEP Western Regional Office - Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103</p> <p>MassDEP Division of Watershed Management Surface Water Discharge Permit Program 627 Main Street, 2nd Floor Worcester, MA 01608</p>
<p>The permittee shall complete an evaluation of alternative methods of operating the existing wastewater treatment facility to optimize the removal of nitrogen, and submit a report to EPA and MassDEP documenting this evaluation and presenting a description of recommended operational changes</p>	<p>Within one year of the effective date of the permit.</p>	<p>Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, MA 02114</p> <p>MassDEP Western Regional Office - Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103</p> <p>MassDEP Division of Watershed Management Surface Water Discharge Permit Program 627 Main Street, 2nd Floor Worcester, MA 01608</p>

<p>The permittee shall submit a report that summarizes activities related to optimizing nitrogen removal efficiencies, documents the annual nitrogen discharge load from the facility, and tracks trends relative to the previous year. [PART E]</p>	<p>The annual report to be submitted by February 1 each year.</p>	<p>Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, MA 02114</p> <p>MassDEP Western Regional Office - Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103</p> <p>MassDEP Division of Watershed Management Surface Water Discharge Permit Program 627 Main Street, 2nd Floor Worcester, MA 01608</p>
<p>Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) [PART F.] Occasional deviations from the routine sampling program are allowed, but the reason for the deviation shall be documented in correspondence appended to the applicable discharge monitoring report. [Footnote 3]</p>	<p>Discharge Monitoring Report Form(s) shall be postmarked no later than the 15th day of the following month.</p>	<p>Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, MA 02114</p> <p>MassDEP Western Regional Office - Bureau of Resource Protection 436 Dwight Street Springfield, Massachusetts 01103</p> <p>MassDEP Division of Watershed Management Surface Water Discharge Permit Program 627 Main Street, 2nd Floor Worcester, MA 01608</p>

Northampton Discharge Monitoring Report Data – MA0101818

Fact Sheet Attachment A

Date	Flow Ave Monthly	Flow Max Daily	BOD Ave Monthly	BOD Max Day	BOD Ave Monthly	TSS Ave Monthly	TSS Day Max	TSS Ave Monthly	BOD % Removal	TSS % Removal	Kjeldahl Nitrogen Ave Mo	Nitrate+ Nitrite Ave Mo
1/31/2006	4.7 Mgal/d	13.7 Mgal/d	21.3 mg/L	83.1 mg/L	1,326.7 lb/d	10.8 mg/L	36 mg/L	648.2 lb/d	79 %	82.7 %	21 mg/L	0.4 mg/L
2/28/2006	41.8 Mgal/d	9.4 Mgal/d	16.4 mg/L	26.4 mg/L	651.3 lb/d	9.2 mg/L	18 mg/L	372.8 lb/d	90 %	90.9 %	8.6 mg/L	0.45 mg/L
3/31/2006	4.7 Mgal/d	4.2 Mgal/d	15.8 mg/L	29.1 mg/L	505.4 lb/d	6.4 mg/L	12 mg/L	202 lb/d	93 %	95.6 %	22 mg/L	0.51 mg/L
4/30/2006	4.5 Mgal/d	4.7 Mgal/d	15.2 mg/L	27.7 mg/L	520.7 lb/d	5.1 mg/L	17 mg/L	173.5 lb/d	93.4 %	96.5 %	22 mg/L	0.33 mg/L
5/31/2006	4.5 Mgal/d	5 Mgal/d	15.9 mg/L	30 mg/L	642.6 lb/d	9.9 mg/L	37 mg/L	392.1 lb/d	91.8 %	94.8 %	20 mg/L	0.26 mg/L
6/30/2006	4.6 Mgal/d	6.1 Mgal/d	12 mg/L	21 mg/L	472.3 lb/d	3.9 mg/L	10 mg/L	154.4 lb/d	93.4 %	97.3 %	15 mg/L	1.8 mg/L
7/31/2006	4.6 Mgal/d	12.8 Mgal/d	6.6 mg/L	10.4 mg/L	208.7 lb/d	2.3 mg/L	4 mg/L	72.1 lb/d	97.3 %	98.8 %	3.8 mg/L	8.7 mg/L
8/31/2006	4.6 Mgal/d	4.3 Mgal/d	11.7 mg/L	27.5 mg/L	322.4 lb/d	4.5 mg/L	14.5 mg/L	123 lb/d	96 %	97.9 %	7.4 mg/L	7.7 mg/L
9/30/2006	4.6 Mgal/d	4 Mgal/d	10.4 mg/L	14.7 mg/L	311.5 lb/d	3 mg/L	5 mg/L	89.8 lb/d	96.2 %	98.6 %	2 mg/L	7.3 mg/L
10/31/2006	4.4 Mgal/d	7.3 Mgal/d	6.1 mg/L	9.4 mg/L	197.6 lb/d	3 mg/L	5 mg/L	96.8 lb/d	97.3 %	98.3 %	8 mg/L	6.5 mg/L
11/30/2006	4.4 Mgal/d	6.7 Mgal/d	6.3 mg/L	12.3 mg/L	285.7 lb/d	2.9 mg/L	6.5 mg/L	133.3 lb/d	95.8 %	97.6 %	4.2 mg/L	6.1 mg/L
12/31/2006	4.4 Mgal/d	4.6 Mgal/d	9 mg/L	19 mg/L	300 lb/d	5.6 mg/L	11 mg/L	184 lb/d	95.2 %	96 %	3.5 mg/L	6 mg/L
1/31/2007	4.2 Mgal/d	6 Mgal/d	16.6 mg/L	22.4 mg/L	591.2 lb/d	9.9 mg/L	18 mg/L	357.9 lb/d	91.6 %	93.1 %	4.5 mg/L	6.2 mg/L
2/28/2007	4.1 Mgal/d	4.1 Mgal/d	19.1 mg/L	29.7 mg/L	519.2 lb/d	12 mg/L	19 mg/L	328.3 lb/d	93.2 %	93.4 %	4.5 mg/L	6.2 mg/L
3/31/2007	4.1 Mgal/d	7.3 Mgal/d	13.8 mg/L	24.8 mg/L	509.2 lb/d	8.3 mg/L	17.5 mg/L	302.4 lb/d	89.9 %	92.3 %	28 mg/L	0.2 mg/L
4/30/2007	4.4 Mgal/d	15.5 Mgal/d	14.1 mg/L	18.5 mg/L	842.6 lb/d	7 mg/L	13.5 mg/L	444.5 lb/d	85.4 %	89.5 %	13 mg/L	0.11 mg/L
5/31/2007	5 Mgal/d	5.5 Mgal/d	13.4 mg/L	24.6 mg/L	527 lb/d	13.1 mg/L	32 mg/L	505.2 lb/d	93.2 %	91 %	14 mg/L	0.11 mg/L
6/30/2007	4.4 Mgal/d	7 Mgal/d	10.2 mg/L	13.3 mg/L	379.9 lb/d	7.8 mg/L	19 mg/L	317 lb/d	96 %	96.3 %	15 mg/L	0.62 mg/L
7/31/2007	4.4 Mgal/d	7.9 Mgal/d	11.1 mg/L	28.7 mg/L	368.9 lb/d	10.8 mg/L	29 mg/L	361.6 lb/d	96.7 %	96.5 %	11 mg/L	5.1 mg/L
8/31/2007	4.4 Mgal/d	4.9 Mgal/d	10.1 mg/L	15.2 mg/L	317.8 lb/d	5.9 mg/L	7 mg/L	189.9 lb/d	96.8 %	97 %	6.1 mg/L	4.3 mg/L
9/30/2007	4.4 Mgal/d	7.6 Mgal/d	12.8 mg/L	26.4 mg/L	393.4 lb/d	9.6 mg/L	27 mg/L	301.2 lb/d	96.1 %	96.2 %	5.8 mg/L	5.8 mg/L
10/31/2007	4.4 Mgal/d	4.3 Mgal/d	11.6 mg/L	15.1 mg/L	327.2 lb/d	7.1 mg/L	11 mg/L	202.4 lb/d	96.3 %	96.9 %	11 mg/L	3.4 mg/L
11/30/2007	4.2 Mgal/d	4.3 Mgal/d	11.5 mg/L	19 mg/L	321.7 lb/d	2.3 mg/L	4 mg/L	65.1 lb/d	96.1 %	99 %	22 mg/L	3.6 mg/L
12/31/2007	4.1 Mgal/d	4.2 Mgal/d	9.3 mg/L	14.5 mg/L	243.3 lb/d	4.9 mg/L	7 mg/L	130.2 lb/d	95.8 %	97.2 %	14 mg/L	5.1 mg/L

