MODIFICATION OF 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),

Town of Rockland
Board of Sewer Commissioners

is authorized to discharge from the facility located at

Rockland Wastewater Treatment Plant
South End of Concord Street
Rockland, MA 02370

to receiving water named

French Stream

in accordance with effluent limitations monitoring requirements and other conditions set forth in the permit issued on January 26, 2006, as modified by the conditions set forth herein in italics and summarized as follows:

Page 2, Flow Limit, and Page 4, Footnote Number 3., Flow Reporting Requirements

Pages 14, 15 and 16, Section F., COMPLIANCE SCHEDULES

This modification shall become effective April 1, 2007.

This permit modification and the authorization to discharge expires five years from the effective date of the permit, which was July 1, 2006.

Signed this 15th day of FEBRUARY, 2007

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 from outfall serial number **001,** treated effluent to the French Stream. Such discharges shall be limited and monitored as specified below.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS			MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE[2] TYPE**
FLOW LIMIT[3]	*2.5 MGD*	**********	**********	CONTINUOUS	RECORDER
FLOW REPORTING[3]	Report MGD	**********	Report MGD	CONTINUOUS	RECORDER
BOD_5[4] (October 1 - April 30)	20 mg/l 417 lbs/Day	20 mg/l 417 lbs/Day	30 mg/l[1] 626 lbs/Day	2/WEEK	24-HOUR COMPOSITE[5]
TSS[4] (October 1 - April 30)	20 mg/l 417 lbs/Day	20 mg/l 417 lbs/Day	30 mg/l[1] 626 lbs/Day	2/WEEK	24-HOUR COMPOSITE[5]
BOD_5[4] (May 1 - September 30)	6 mg/l 125 lbs/Day	6 mg/l 125 lbs/Day	10 mg/l[1] 209 lbs/Day	2/WEEK	24-HOUR COMPOSITE[5]
TSS[4] (May 1 - September 30)	10 mg/l 209 lbs/Day	10 mg/l 209 lbs/Day	15 mg/l[1] 313 lbs/Day	2/WEEK	24-HOUR COMPOSITE[5]
pH RANGE[1]	6.5 - 8.3 SU SEE PERMIT PAGE 7 OF 16, PARAGRAPH I.A.1.b.			1/DAY	GRAB
TOTAL CHLORINE RESIDUAL[6,7]	0.011 mg/l	**********	0.019 mg/l	1/DAY	GRAB
TOTAL CHLORINE RESIDUAL[6,7]	REPORT mg/l	**********	REPORT mg/l	CONTINUOUS	CONTINUOUS
FECAL COLIFORM[1,6]	200 CFU/100 ml	**********	400 CFU/100 ml	3/WEEK	GRAB
SETTLEABLE SOLIDS	**********	REPORT ml/l	REPORT ml/l	1/DAY	GRAB

CONTINUED FROM PREVIOUS PAGE

A.1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge from outfall serial number **001,** treated effluent to the French Stream. Such discharges shall be limited and monitored as specified below.

EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS			MONITORING REQUIREMENTS	
PARAMETER	**AVERAGE MONTHLY**	**AVERAGE WEEKLY**	**MAXIMUM DAILY**	**MEASUREMENT FREQUENCY**	**SAMPLE[2] TYPE**
AMMONIA NITROGEN October 1 - March 31[8] April 1 - May 31[8] June 1 - September 30	3.3 mg/l 2.5 mg/l 1.0 mg/l	3.3 mg/l 2.5 mg/l 1.0 mg/l	5.7 mg/l 5.7 mg/l 1.5 mg/l	2/WEEK	24-HOUR COMPOSITE[5]
PHOSPHORUS, TOTAL[8] April 1 - October 31 November 1-March 31[8]	0.2 mg/l Report lbs/day 1.0 mg/l Report lbs/day	******** ******** ******** ********	Report mg/l Report lbs/day Report mg/l Report lbs/day	2/WEEK 1/WEEK	24-HOUR COMPOSITE[5] 24-HOUR COMPOSITE[5]
ORTHOPHOSPHORUS November 1-March 31	Report mg/l	********	Report mg/l	1/WEEK	24-HOUR COMPOSITE[5]
COPPER, TOTAL	12 ug/l	*********	19 ug/l	1/MONTH	24-HOUR COMPOSITE[5]
ALUMINUM, TOTAL	88 ug/l	*********	REPORT ug/l	1/MONTH	24-HOUR COMPOSITE[5]
DISSOLVED OXYGEN (May 1 - September 30)	≥7.4 mg/l SEE PERMIT PAGE 7 OF 16, PARAGRAPH I.A.1.h			1/DAY	GRAB
WHOLE EFFLUENT TOXICITY SEE FOOTNOTES 9, 10, 11, and 12	Acute $LC_{50} \geq 100\%$ Chronic C-NOEC ≥ 99%			4/YEAR	24-HOUR COMPOSITE[5]

The permittee shall follow the notification requirements found 40 CFR§ 122.41(m), see Permit Part II General Conditions, Section B.4.c., if a bypass of treatment occurs.

Footnotes:

1. Required for State Certification.

2. All required effluent samples shall be collected from the following locations:

Parameter	**Sampling Location**
Flow	(Influent) headworks building (ultrasonic probe) at Parshall flume
BOD, TSS	(Influent) headworks building just prior to Parshall flume. (Effluent) wetwell immediately following contact chamber
Ammonia, Total Copper, Total Phosphorus	(Effluent) wetwell immediately following contact chamber
TRC, pH, Dissolved Oxygen	(Effluent) cascade steps
Fecal Coliform	(Effluent) end of chlorine contact basin
Whole Effluent Toxicity (WET)	(Diluent) Summer Street bridge upstream from the receiving water. (Effluent) cascade steps

Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP. 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 sampling shall be representative of the effluent that is discharged through outfall 001. A routine sampling program shall be developed in which samples are taken at the same location, same time and same days of every month. Any deviations from the routine sampling program shall be documented in correspondence appended to the applicable discharge monitoring report that is submitted to EPA.

3. ***The flow limit is expressed as a monthly average.***

*The permittee shall also report (**without limit**) the annual average flow, which shall be reported as a rolling average. The first annual average flow value will be calculated using the monthly average flow for the first full month ending after the effective date of the permit modification and the eleven previous monthly average flows. Each subsequent month's discharge monitoring report ("DMR") will report the annual average flow that is calculated from that month and the previous 11 months. The maximum daily flows for each month shall also be reported (**without limit**).*

4. Sampling required for influent and effluent.

5. A 24-hour composite sample will consist of at least twenty four (24) grab samples during a 24-hour consecutive period [e.g. 0700 MON- 0700 TUES].

6. Fecal coliform discharges shall not exceed a monthly geometric mean of 200 colony forming units per (cfu) 100 ml, nor shall they exceed 400 cfu per 100 ml as a daily maximum. This monitoring shall be conducted concurrently with the TRC sampling described below. Fecal coliform samples shall be taken 3 times per week and conducted concurrently with the TRC sampling described below.

   The permittee shall collect and analyze a minimum of one TRC grab sample per day for calibration purposes. The same daily grab sample can be used for both compliance and calibration. A comparison of the grab sample results to the continuous analyzer reading, including the time of the grab samples, shall be attached to the DMRs.

   The permittee shall also report the average monthly and maximum daily discharge of TRC using data collected by the continuous TRC analyzer. Four continuous recording graphs (1/week) showing weekly data or an equivalent alternative record that provides the same data, shall be submitted with the monthly DMRs.

   The permittee shall substitute three TRC grab sample per day, for any day that they are unable to comply with the continuous recording requirement.

7. The minimum level (ML) for total residual chlorine is defined as 20 ug/l. This value is the minimum level for chlorine using EPA approved methods found in the most currently approved version of Standard Methods for the Examination of Water and Wastewater, Method 4500 CL-E and G, or USEPA Manual of Methods of Analysis of Water and Wastes, Method 330.5. The permittee shall use one of these two methods or another approved method that has an equivalent or lower ML (see 40 CFR, part 136). For effluent limitations less than 20 ug/l, compliance/non-compliance will be determined based on the ML. Sample results of 20 ug/l or less shall be reported as zero on the discharge monitoring report.

8. **See Section F of this permit for a schedule of compliance.**

9. The permittee shall conduct chronic (and modified acute) toxicity tests four times per year. The chronic test may be used to calculate the acute LC_{50} at the 48 hour exposure interval. The permittee shall test the daphnid, Ceriodaphnia dubia, only. Toxicity test samples shall be collected during the second week of the months of January, April, July and October. The test results shall be submitted by the last day of the month following the completion of the test. The results are due February 28th, May 31st, August 31st, and November 30th, respectively. The tests must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit.

Test Dates Second week in	**Submit Results By:**	**Test Species**	**Acute Limit LC_{50}**	**Chronic Limit C-NOEC**
January April July October	February 28th May 31st August 31st November 30th	Ceriodaphnia dubia (daphnid) See Attachment A	≥ 100%	≥ 99%

After submitting **one year** and a **minimum** of **four** consecutive sets of WET test results in one year, all of which demonstrate compliance with the WET permit limits, the permittee may request a reduction in the WET testing requirements. The permittee is required to continue testing at the frequency specified in the permit until notice is received by certified mail from the EPA that the WET testing requirement has been changed.

10. The LC_{50} is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.

11. C-NOEC (chronic-no observed effect concentration) is defined as the highest concentration of toxicant or effluent to which organisms are exposed in a life cycle or partial life cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the test results exhibit a linear dose-response relationship. However, where the test results do not exhibit a linear dose-response relationship, the permittee must report the lowest concentration where there is no observable effect. The "99% or greater" limit is defined as a sample which is composed of 99% (or greater) effluent, the remainder being dilution water. This is a maximum daily limit derived as a percentage of the inverse of the dilution factor of 1.01.

12. 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.1. (Continued)

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 6.5 nor greater than 8.3 at any time.

c. The discharge shall not cause objectionable discoloration of the receiving waters.

d. The effluent shall contain neither a 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 permittee shall minimize the use of chlorine while maintaining adequate bacterial control.

g. The permittee shall submit the results to EPA of any additional testing done to that required herein if it is conducted in accordance with EPA approved methods, consistent with the provisions of 40 CFR §122.41(l)(4)(ii).

h. The dissolved oxygen level at the point of discharge must maintain a minimum of 7.4 mg/l.

2. All POTWs must provide adequate notice to the Director of the following:

   a. Any new introduction of pollutants into that POTW from an indirect discharger in a primary industry category 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.

B.1. Limitations for Industrial Users:

a. Pollutants introduced into POTW's by a non-domestic source (user) shall not pass through the POTW or interfere with the operation or performance of the works.

b. 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 (90 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).

B.2. Industrial Pretreatment Program

a. 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):

1. 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 and maintain adequate records.

2. 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.

3. Obtain appropriate remedies for noncompliance by any industrial user with any pretreatment standard and/or requirement.

4. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.

b. The permittee shall provide the EPA (and the 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 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 October 1 of each year.

c. 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).

d. 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.

e. The permittee must modify its pretreatment program 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) Enforcement response plan; (2) revised sewer use ordinances; and (3) slug control evaluations. 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 the permit.

B.3. Toxics Control

a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

B.4. Numerical Effluent Limitations for Toxicants

EPA or MassDEP may use the results of the toxicity tests and chemical analyses conducted pursuant to this permit, as well as national water quality criteria developed pursuant to Section 304(a)(1) of the Clean Water Act (CWA), state water quality criteria, and any other appropriate information or data, to develop numerical effluent limitations for any pollutants, including but not limited to those pollutants listed in Appendix D of 40 CFR Part 122.

C. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from outfall 001. 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).

D. 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 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 Control Plan:

   The permittee shall develop and implement a plan to control infiltration and inflow (I/I) to the 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 permittee's 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.

- The permittee shall require, through appropriate agreements, that all member communities develop and implement infiltration and inflow control plans sufficient to ensure that high flows do not cause or contribute to a violation of the permittee's effluent limitations, or cause overflows from the permittee's collection system.

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 the anniversary date of the effective date of this permit. 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, 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).

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 comply with the 40 CFR, Part 503 regulations. A compliance guidance document is attached to help 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 than1500	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 regulations 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.

   In such cases, 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

F. COMPLIANCE SCHEDULES

No later than April 1, 2010, *the permittee shall achieve compliance with the final cold weather limits for ammonia as nitrogen (October 1 through May 31) and the summer total phosphorus limit (April 1 -October 31). During the interim period, monitoring and reporting of total phosphorous and ammonia as nitrogen shall be performed in accordance with the requirements in Part A.1.*

During the interim period, the permittee shall achieve an average monthly total phosphorus limit of 1 mg/l during April 1-October 31, shall further optimize the removal of total phosphorus using existing equipment pursuant to requirements in item 1 below, and will be subject to earlier compliance dates for achieving the summer total phosphorous limit and the winter ammonia nitrogen limits if it is determined to be feasible pursuant to items 1 and 2 below.

During the interim period there is no cold weather interim limit for ammonia as nitrogen.

1. Phosphorus Removal Optimization Requirement

Upon the effective date of the permit, the permittee shall begin to develop a plan for determining the lowest effluent phosphorus concentration achievable by the existing facility. The plan shall include, at a minimum, the use of multiple dosing points for chemical addition, various dosage rates, increased monitoring of influent and effluent phosphorus concentrations, and a plan for minimizing influent phosphorus loading to the treatment facility. The permittee shall submit the plan within three (3) months of the effective date of the permit ***(note: the plan was submitted on September 28, 2006)*** *and implement the plan within three (3) months of its submittal, or upon approval by the agencies, whichever is sooner.*

The plan shall provide for a phosphorous removal study to be performed during one full phosphorus removal season (i.e. the study shall be performed during the months of April, May, June, July, August, September, and October) ***(note: the study must be completed by October 31, 2007).***

A final report documenting the results of the study shall be submitted by January 31, 2008. This final report shall include, at a minimum, the chemical dosage rates used, a summary of the influent and effluent phosphorus concentrations achieved, and an evaluation of whether the optimization of phosphorus removal at the existing facility is sufficient to consistently achieve the final monthly average phosphorus limit of 0.2 mg/l.

If the final report concludes that the final limit of 0.2 mg/l can be achieved by optimizing removal at the existing plant and minimizing influent loading, the final permit limit of 0.2 mg/l or less shall become effective on April 1, 2008.

If the final report concludes that the final limit cannot be achieved by the existing facilities, upgrades to the facility shall be completed according to the schedule in item 3 below.

2. ***Ammonia Removal Optimization Requirement***

During the months of October 1, 2006 through May 31, 2007, the permittee shall operate the existing treatment plant in a manner consistent with optimizing removal of ammonia nitrogen. The permittee shall collect operational and effluent data during this period necessary to determine the treatment plant's ability to achieve the final winter permit limits for ammonia (i.e the final permit limits for the months of October through May). The permittee shall submit a report by August 31, 2007 which summarizes operational and effluent data collected during this period and concludes whether the existing facility is capable of achieving the final limits. If the permittee concludes that the facility can achieve the final limits, the limits must be achieved beginning on October 1, 2007.

If the final report concludes that the final limits cannot be achieved by the existing facilities, upgrades to the facility shall be completed according to the schedule in item 3 below.

3. ***Construction Schedule***

a. *By April 30, 2008, submit a plan for achieving the final limit(s). The plan shall describe the treatment options evaluated, include preliminary cost estimates, and describe the selected treatment plant upgrades necessary to achieve the final effluent limits.*

b. *By March 31, 2009, complete plans and specifications for the necessary facility upgrades*

c. *By April 1, 2010 complete construction of necessary upgrades and attain compliance with the final effluent limit(s).*

4. Technology Scaling

Design of any facility improvements during the effective dates of this permit shall not preclude installation of technology compatible with achieving more stringent total phosphorus limits that may be set in the future.

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
Southeast Regional Office
Bureau of Resource Protection
20 Riverside Drive
Lakville, MA 02347

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

Copies of all reports required to be submitted in Section B, "Limitations for Industrial Users and Industrial Pretreatment Program" shall be sent to:

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

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 this permit or 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 or any portion of 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.