EXHIBIT 3

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 <u>et seq</u>. (the "CWA")], and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

Springfield Water and Sewer Commission

are authorized to discharge from a facility located at:

Springfield Regional Waste Water Treatment Facility Route 5 Bondi Island Agawam, MA 01001

And

Combined Sewer Overflow (CSO) discharges at 24 locations

to receiving waters named: Connecticut River Segment MA 34-05 (Waste Water Treatment Facility Outfall # 001 and CSO outfalls # 007, 008, 010, 011, 012, 013, 014, 015A, 015B,016, 018, 042 and 049), Chicopee River Segment MA36-25 (CSO outfalls # 034, 035, 036A, and 037) and Mill River Segment MA34-29 (CSO outfalls # 017, 019, 024, 025, 045, 046, and 048)

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

The Towns of Agawam, East Longmeadow, Longmeadow, Ludlow, West Springfield and Wilbraham are co-permittees for Part C, Unauthorized Discharges; Part D., Operation and Maintenance, which include conditions regarding the operation and maintenance of the collection systems owned and operated by the Towns; and Part E., Alternate Power Source.

Operation and maintenance of the sewer system shall be in compliance with the General Requirements of Part II and the terms and conditions of Part C, Part D. and Part E of this permit. The permittee and each co-permittee are severally liable under Part C, Part D and Part E for their own activities and required reporting with respect to the portions of the collection system that they own or operate. They are not liable for violations of Part C, Part D and Part E committed by others relative to the portions of the collection system owned and operated by others. Nor are they responsible for any reporting that is required of other permittees under Part C, Part D and Part E. The responsible Town departments are:

Town of Agawam	Town of East Longmeadow	Town of Longmeadow
Department of Public Works	Department of Public Works	Department of Public Works
1000 Suffield St	60 Center Square, 2nd Floor	31 Pondside Road
Agawam, MA 01001	East Longmeadow, MA 01028	Longmeadow, MA 01106
Town of Ludlow	Town of West Springfield	Town of Wilbraham
Department of Public Works	Department of Public Works	Department of Public Works
198 Sportsmans Road	26 Central Street, Suite 17	240 Springfield St.
Ludlow, MA 01056	West Springfield, MA 01089	Wilbraham, MA 01095

This permit will become effective on the first day of the calendar month immediately following sixty days after signature.

* This permit and the authorization to discharge will expire at midnight, five (5) years from the last day of the month preceding the effective date.

This permit supersedes the permit signed on December 8, 2000.

This permit consists of 24 pages in Part I including effluent limitations and monitoring requirements, Attachment A (Freshwater Acute Toxicity Test Procedure and Protocol, February 2011), Attachment B (Freshwater Chronic Toxicity Test Procedure and Protocol, April 2013), Attachment C (Reassessment of Technically Based Industrial Discharge Limits), Attachment D (NPDES Permit Requirement for Industrial Pretreatment Annual Report), and Part II (25 pages including NPDES Part II Standard Conditions). Signed this day of

Lynne A. Hamjian, Acting Director Office of Ecosystem Protection Environmental Protection Agency Boston, MA Lealdon Langley, Director Massachusetts Wetlands and Wastewater Programs Department of Environmental Protection Commonwealth of Massachusetts Boston, MA

* Pursuant to 40 CFR 124.15(b)(3), if no comments requesting a change to the draft permit are received, the permit will become effective upon the date of signature.

PART I

A.1. During the period beginning the effective date and lasting through expiration, the permittee is authorized to discharge treated effluent from outfall serial number **001** to the Connecticut River. Such discharges shall be limited and monitored by the permittee as specified below. A bypass of secondary treatment is allowed when wet weather influent flow exceeds the wet weather capacity of the secondary treatment.

Effluent Characteristic		Discharge Limitation			Monitoring Requirement *4	
Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Effluent Flow *2, *3	MGD	67		Report	Continuous	Recorder
BOD ₅ *5	mg/l lbs/day	30 16763	45 25145	Report Report	1/Day 1/Day	24-Hour Composite ^{*6} 24-Hour Composite ^{*6}
TSS *5	mg/l lbs/day	30 16,763	45 25,145	Report Report	1/Day 1/Day	24-Hour Composite ^{*6} 24-Hour Composite ^{*6}
pH Range ^{*1}	Standard Units	6.5 – 8.3 (See Permit Part I.A.1.b.)		1/Day	Grab	
<i>Escherichia coli</i> ^{*1,*7} (April 1 - October 31)	cfu/100 ml	126		409	5/Week	Grab
Total Residual Chlorine *1, *8	mg/l	0.26	_	0.46	5/Week	Grab

Part I.A.1. (Continued)

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement ⁴		
Parameter		Average Monthly	Average Weekly	Maximum Daily	Measurement Frequency	Sample Type
Ammonia Nitrogen, Total	mg/l lbs/day	Report Report		Report Report	1/Week 1/Week	24-Hour Composite ^{*6} 24-Hour Composite ^{*6}
Nitrogen, Total *9	mg/l lbs/day	Report Report		Report	1/Week 1/Week	24-Hour Composite ^{*6} 24-Hour Composite ^{*6}
Nitrite+Nitrate, Total	mg/l lbs/day	Report Report		Report	1/Week 1/Week	24-Hour Composite ^{*6} 24-Hour Composite ^{*6}
Kjeldahl Nitrogen, Total	mg/l lbs/day	Report Report		Report	1/Week 1/Week	24-Hour Composite ^{*6} 24-Hour Composite ^{*6}
Whole Effluent Toxicity *10, *11, *12, *13	%	Acute	$LC_{50} \geq$	100%	4/Year	24-Hour Composite ^{*6}
Hardness ^{*13}	mg/l	Report		4/Year	24-Hour Composite ^{*6}	
Ammonia Nitrogen as N ^{*13}	mg/l		Report		4/Year	24-Hour Composite ^{*6}
Total Recoverable Aluminum *13	mg/l		Report		4/Year	24-Hour Composite ^{*6}
Total Recoverable Cadmium *13	mg/l	Report		4/Year	24-Hour Composite ^{*6}	
Total Recoverable Copper *13	mg/l	Report		4/Year	24-Hour Composite ^{*6}	
Total Recoverable Nickel *13	mg/l	Report		4/Year	24-Hour Composite ^{*6}	
Total Recoverable Lead *13	mg/l	Report		4/Year	24-Hour Composite ^{*6}	
Total Recoverable Zinc *13	mg/l	Report		4/Year	24-Hour Composite ^{*6}	

Footnotes:

- *1. Required for State Certification.
- *2. 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.
- *3. The following information shall be reported and submitted as an attachment to the monthly DMRs for each day there was a bypass of secondary treatment: date and time of initiation, total influent flow at time of initiation, date and time of termination, total influent flow at time of termination, total duration of flow, and total volume of flow. A bypass of secondary treatment also is subject to the requirements of Part II.B.4.c. and Part II.D.1.e. of this permit.

Flows shall be measured using a meter.

The permittee shall not accept septage during any calendar day in which a bypass of secondary treatment is anticipated.

Monitoring	Date and Time	Influent Flow at	Date and Time	Influent Flow	Total	Total
Location	of Initiation of	Time of	of Termination	at Time of	Duration	Volume of
	Flow	Initiation (MGD)	of Flow	Termination	of Flow	Flow
				(MGD)	(Hours)	(MGD)
Secondary						
Bypass ^a						

^aFlows shall be measured using a meter.

*4. All required effluent samples shall be collected at a representative point following treatment and the comingling of secondary effluent with flows which bypass secondary treatment. Bacteria and TRC samples shall be collected after exiting the chlorine contact chamber.

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. Any changes to the routine sampling program 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.

*5. Sampling is required for influent and effluent.

- *6. A 24-hour composite sample 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.
- *7. The monthly average limit for *Escherichia coli* (*E. coli*) is expressed as a geometric mean. *E. coli* monitoring shall be conducted concurrently with a total residual chlorine sample.
- *8. Total residual chlorine monitoring is required whenever chlorine is added to the treatment process (i.e. TRC sampling is not required if chlorine is not added for disinfection or other purpose). The limitations are in effect year-round. For months when chlorine is not added to the treatment system a no data indicator (NODI) of C shall be reported on the monthly discharge monitoring report.

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 <u>Standard Methods for the Examination of Water and Wastewater</u>, Method 4500 CL-E and G. One of these methods must be used to determine total residual chlorine. For effluent limitations less than 20 ug/l, the compliance level will be the ML. Sampling results less than the detection limit shall be reported as "≤ [detection limit]" on the Discharge Monitoring Report.

Chlorination and dechlorination systems shall include an alarm system for indicating system interruptions or malfunctions. Any interruption or malfunction of the chlorine dosing system that may have resulted in levels of chlorine that were inadequate for achieving effective disinfection, or interruptions or malfunctions of the dechlorination system that may have resulted in 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 levels of chlorine or dechlorination chemicals occurred.

- *9. See Part 1.H. SPECIAL CONDITIONS for requirements regarding optimization and reporting for nitrogen removal.
- *10. The permittee shall conduct acute toxicity tests four times per year. The permittee shall test the daphnid, <u>*Ceriodaphnia dubia*</u>, only. Toxicity test samples shall be collected during the same week each time during the months of March, June, September and December. The test results shall be submitted by the last day of the month following the completion of the test. The results are due April 30th, July 31st, October 31st, and January 31st, respectively. The tests must be performed in accordance with test procedures and protocols specified in **Attachments A and B** of this permit.

Test Dates during the month of:	Submit Results By:	Test Species	Acute Limit LC ₅₀	Chronic Limit C-NOEC
March June September December	April 30 July 31 October 31 January 31	<u>Ceriodaphnia dubia</u> (Daphnid)	≥ 100%	Report

- *11. The LC₅₀ 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.
- *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 Attachments A and B, 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 Attachments A and B, 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. This guidance is found in Attachment G of the NPDES Program Instructions for the Discharge Monitoring Report Forms (DMRs) which is sent to all permittees with their annual set of DMRs and may also be found on the EPA, Region I web site at http://www.epa.gov/region01/enforcementandassistance/dmr.html. If this guidance is revoked, the permittee shall revert to obtaining individual approval as outlined in Attachments A and B. Any modification or revocation to this guidance shall 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 Attachments A and B. If the permittee uses an alternative dilution water, the ambient water will still need to be tested.
- *13. For each whole effluent toxicity test the permittee shall report on the appropriate discharge monitoring report, (DMR), the concentrations of the hardness, ammonia nitrogen as nitrogen, total recoverable aluminum, cadmium, copper, lead, nickel, and zinc found in the 100 percent effluent sample. All these aforementioned chemical parameters shall be determined to at least the minimum quantification level shown in **Attachments A and B**. Also the permittee should note that all chemical parameter results must still be reported in the appropriate toxicity report.

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 Standard Units (S.U.) at any time.
- c. The discharge shall not cause objectionable discoloration of the receiving waters.
- d. The effluent shall not contain a visible oil sheen, foam, or floating solids at any time.
- e. The permittee's treatment facility will maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand during dry weather. Dry weather is defined as any calendar day on which there is less than 0.1 inch of rain and no snow melt. The percent removal shall be calculated as a monthly average using the influent and effluent BOD₅ and TSS values collected during dry weather days.
- f. The permittee shall minimize the use of chlorine while maintaining adequate bacterial control.
- g. The results of sampling for any parameter analyzed in accordance with EPA approved methods above its required frequency must also be reported.
- h. If the average annual flow in any calendar year exceeds 80 percent of the facility's design flow [80% x 67 MGD= 54 MGD], the permittee shall submit a report to MassDEP by <u>April 30</u> of the following calendar year describing its plans for further flow increases and describing how it will maintain compliance with the effluent flow limit and all other effluent limitations and conditions.
- 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 which would be subject to section 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; 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 will 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.
- 3. Prohibitions Concerning Interference and Pass Through:

- a. Pollutants introduced into POTW's by a non-domestic source (user) will not pass through the POTW or interfere with the operation or performance of the works.
- 4. Toxics Control
 - a. The permittee will not discharge any pollutant or combination of pollutants in toxic amounts.
 - b. Any toxic components of the effluent will 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.
- 5. Numerical Effluent Limitations for Toxicants
 - a. 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.

B. COMBINED SEWER OVERFLOWS (CSOs)

1. Effluent Limitations

During wet weather, the permittee is authorized to discharge storm water/wastewater from the CSO outfalls listed below:

Outfall No.	Location	Latitude Longitude
To Connecticu	ıt River	
007	Rowland St.	42° 12' 72° 62'
008	Washburn St. 4	42° 11' 72° 62'
010	Clinton St.	42° 10' 72° 60'
011	Liberty St.	42° 10' 72° 59'
012	Worthington St.	42° 10' 72° 59'
013	Bridge St.	42° 10' 72° 59'
014	Elm St.	42° 10' 72° 59'
015A	Union St.	42° 10' 72° 59'
015B	Union St.	42° 10' 72° 59'
016	York St.	42° 09' 72° 59'
018	Longhill St.	42° 06' 72° 58'
049	Springfield St.	42° 10' 72° 62'
042	Bondi Island	
To Chicopee F	River	
034	Main St.	42° 16' 72° 51'

50' 50'
50'
50'
58'
57'
56'
56'
58'
58'
56'

- 2. The effluent discharged from these CSOs is subject to the following limitations:
 - a. The discharges shall receive treatment at a level providing Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT) to control and abate conventional pollutants and Best Available Technology Economically Achievable (BAT) to control and abate non-conventional and toxic pollutants. The EPA has made a Best Professional Judgment (BPJ) determination that BPT, BCT, and BAT for combined sewer overflow (CSO) control includes the implementation of Nine Minimum Controls (NMC) specified below. These Nine Minimum Controls and the Nine Minimum Controls Minimum Implementation Levels which are detailed further in Part I.B.3. are requirements of this permit.
 - (1) Proper operation and regular maintenance programs for the sewer system and the combined sewer overflows;
 - (2) Maximum use of the collection system for storage;
 - (3) Review and modification of the pretreatment program to assure CSO impacts are minimized;
 - (4) Maximization of flow to the POTW for treatment;
 - (5) Prohibition of dry weather overflows from CSOs;
 - (6) Control of solid and floatable materials in CSOs;
 - (7) Pollution prevention programs that focus on contaminant reduction activities;
 - (8) Public notification to ensure that the public receives adequate notification of CSO occurrences and impacts;
 - (9) Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

- b. The discharges shall not cause or contribute to violations of federal or state Water Quality Standards.
- 3. Nine Minimum Controls Minimum Implementation Levels
 - a. The permittee must implement the nine minimum controls in accordance with the documentation provided to EPA and MassDEP or as subsequently modified to enhance the effectiveness of the controls. This implementation must include the following controls plus other controls the permittee can reasonably undertake as set forth in the documentation.
 - b. Each CSO structure/regulator, pumping station and/or tidegate shall be routinely inspected, at a minimum of once per month, to insure that they are in good working condition and adjusted to minimize combined sewer discharges (NMC # 1, 2 and 4). The following inspection results shall be recorded: the date and time of inspection, the general condition of the facility, and whether the facility is operating satisfactorily. If maintenance is necessary, the permittee shall record: the description of the necessary maintenance, the date the necessary maintenance was performed, and whether the observed problem was corrected. The permittee shall maintain all records of inspections for at least three years.

Annually, no later than April 30th, the permittee shall submit a certification to MassDEP and EPA which states that the previous calendar year's monthly inspections were conducted, results recorded, and records maintained.

MassDEP and EPA have the right to inspect any CSO related structure or outfall at any time without prior notification to the permittee.

- c. Discharges to the combined system of septage, holding tank wastes, or other material which may cause a visible oil sheen or containing floatable material are prohibited during wet weather when CSO discharges may be active (NMC # 3, 6, and 7).
- d. Dry weather overflows (DWOs) are prohibited (NMC # 5). All dry weather sanitary and/or industrial discharges from CSOs must be reported to EPA and MassDEP orally within 24 hours of the time the permittee becomes aware of the circumstances and a written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. See also Paragraph D.1.e of Part II of this permit.
- e. The permittee shall quantify and record all discharges from combined sewer outfalls (NMC # 9). Quantification shall be through direct measurement. The following information must be recorded for each combined sewer outfall for each discharge event, as set forth in Part I.B.4.:
 - Duration (hours) of discharge;
 - Volume (gallons) of discharge;
 - National Weather Service precipitation data from the nearest gage where precipitation

is available at daily (24-hour) intervals and the nearest gage where precipitation is available at one-hour intervals. Cumulative precipitation per discharge event shall be calculated.

The permittee shall maintain all records of discharges for at least six years after the effective date of this permit.

f. The permittee shall install and maintain identification signs for all combined sewer outfall structures (NMC # 8). The signs must be located at or near the combined sewer outfall structures and easily readable by the public from the land and water. These signs shall be a minimum of 12 x 18 inches in size, with white lettering against a green background, and shall contain the following information:

SPRINGFIELD WATER AND SEWER COMMISSION WET WEATHER SEWAGE DISCHARGE OUTFALL (discharge serial number)

Where easements over property not owned by the permittee must be obtained to meet this requirement, the permittee shall identify the appropriate landowners and obtain the necessary easements, to the extent practicable.

The permittee, to the extent feasible, shall place additional signs in Spanish or add a universal wet weather sewage discharge symbol to existing signs.

g. Within 90 days of the effective date of the permit, the permittee shall submit to EPA and MassDEP a public notification plan (NMC #8). As part of this plan, notification shall be provided electronically to any interested party, and a posting made on the permittee's website, of a probable CSO activation within one 24 hours of the initiation of any CSO discharge(s). Subsequently, within 24 hours of the termination of any CSO discharges(s), the permittee shall provide the following information on their website and in a follow-up electronic communication to any interested party:

CSO number and location Confirmation of CSO discharge Total volume discharged from the CSO Date, start time and stop time of the CSO discharge

This notification procedure and the public notification plan shall be implemented no later than 180 days following the effective date of the permit.

4. Nine Minimum Controls Reporting Requirement

<u>Annually, no later than April 30th</u>, the permittee shall submit a report summarizing activities during the previous calendar year relating to compliance with the nine minimum controls including the required information on the number of activations for each CSO as well as the volume of each discharge from each CSO.

5. Combined Sewer Outfalls

For each combined sewer outfall (CSO **outfalls #007, 008, 010, 011, 012, 013, 014, 015A, 015B, 016, 018, 042, 049, 034, 035, 036A, 037 017, 019, 024, 025, 045, 046, and 048**), the permittee must monitor and report the following information in each monthly DMR.

Parameters	Reporting Requirements	Monitoring Requirements	
	Total Monthly	Measurement Frequency	Sample Type
Total Flow	Report Gallons	Daily, when discharging	Continuous
Total Flow Duration (Duration of flow through CSO)	Report Hours	Daily, when discharging	Continuous
Number of CSO Discharge Events	Report Monthly Count	Daily, when discharging	Count

- a. For Total Flow, measure the total flow discharged from each CSO outfall during the month. For Total Flow Duration provide the total duration (hours) of discharges for each CSO outfall during the month.
- b. For those months when a CSO discharge does not occur, the permittee must still complete the monthly DMR with the appropriate no discharge (NODI) code for each outfall.

C. UNAUTHORIZED DISCHARGES

The permittee and co-permittees are 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.and Part I.B.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.D.1.e. (1) of the General Requirements of this permit (Twenty-four-hour reporting).

Notification of SSOs to MassDEP shall be made on its SSO Reporting Form (which includes MassDEP

Regional Office telephone numbers). The reporting form and instructions for its completion may be found online at http://www.mass.gov/eea/agencies/massdep/service/approvals/sanitary-sewer-overflow-bypass-backup-notification.html.

D. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the collection system owned and operated respectively by the Towns of Agawam, East Longmeadow, Longmeadow, Ludlow, West Springfield and Wilbraham shall be in compliance with the General Requirements of Part II and the terms and conditions of Part C, Part D and Part E of this permit. Each of the Towns of Agawam, East Longmeadow, Longmeadow, Ludlow, West Springfield and Wilbraham shall only be responsible under Part II, Part C, Part D and Part E of this permit for only its own infrastructure, activities and required reporting with respect to the portions of the collection system that each owns or operates.

Operation and maintenance of that portion of the collection system and the entirety of the treatment system owned and operated by the Springfield Water and Sewer Commission shall be in compliance with the terms and conditions of Part C, Part D and Part E of this permit and the General Requirements of Part II. The Springfield Water and Sewer Commission shall only be responsible under Part C, Part D and Part E of this permit and the General Requirements of Part II for its own infrastructure, activities and required reporting with respect to the portion of the collection and treatment system that it owns or operates. No Permittee shall be responsible for violations of Part C, Part D and Part E of this permit and/or the General Requirements of Part II committed by another Permittee relative to the portions of the collection system owned and operated by such other Permittee. In the event of any conflict between the above provisions and any other term or provision of this Permit, the above provisions shall control. The permittee and each co-permittee are required to complete the following activities for the respective portions of the collection system which they operate:

1. Maintenance Staff

The permittee and co-permittees shall each 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. Provisions to meet this requirement will be described in the Collection System O & M Plan required pursuant to Section D.5. below.

2. Preventative Maintenance Program

The permittee and co-permittees shall each will maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program will include an inspection program designed to identify all potential and actual unauthorized discharges. Plans and programs to meet this requirement will be described in the Collection System O & M Plan required pursuant to Section D.5. below.

3. Infiltration/Inflow:

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The permittee and co-permittees shall each control infiltration and inflow (I/I) into the sewer system as necessary to prevent high flow related unauthorized discharges from their collection systems and high flow related violations of the wastewater treatment plant's effluent limitations. Plans and programs to control I/I shall be described in the Collection System O & M Plan required pursuant to Section D.5. below.

4. Collection System Mapping

<u>Within 30 months of the effective date of this permit</u>, the permittee and co-permittees shall each prepare a map of each sewer collection system it owns (see page 1 of this permit for the effective date). The map shall be on a street map of the community, with sufficient detail and at a scale to allow easy interpretation. The collection system information shown on the map shall be based on current conditions and shall be kept up to date and available for review by federal, state, or local agencies. Such map(s) shall include, but not be limited to the following:

- a. All sanitary sewer lines and related manholes;
- b. All combined sewer lines, related manholes, and catch basins;
- c. All combined sewer regulators and any known or suspected connections between the sanitary sewer and storm drain systems (e.g. combination manholes);
- d. All outfalls, including the treatment plant outfall(s), CSOs, and any known or suspected SSOs, including stormwater outfalls that are connected to combination manholes;
- e. All pump stations and force mains;
- f. The wastewater treatment facility(ies);
- g. All surface waters (labeled);
- h. Other major appurtenances such as inverted siphons and air release valves;
- i. A numbering system which uniquely identifies manholes, catch basins, overflow points, regulators and outfalls;
- j. The scale and a north arrow; and
- k. The pipe diameter, date of installation, type of material, distance between manholes, interconnections with collection systems owns by other entities, and the direction of flow.
- 5. Collection System Operation and Maintenance Plan

The permittee and co-permittees shall each develop and implement a Collection System Operation and Maintenance Plan.

- a. <u>Within six (6) months of the effective date of the permit</u>, the permittee and co-permittees shall each submit to EPA and MassDEP
 - (1) A description of the collection system management goal, staffing, information management, and legal authorities;
 - (2) A description of the collection system and the overall condition of the collection system including a list of all pump stations and a description of all recent studies and construction activities; and

- (3) A schedule for the development and implementation of the full Collection System O & M Plan including the elements in paragraphs b.1. through b.8. below.
- b. The full Collection System O & M Plan shall be completed, implemented, and submitted to EPA and MassDEP within twenty-four (24) months from the effective date of the permit. The Plan shall include:
 - (1) The required submittal from paragraph 5.a. above, update to reflect current information;
 - (2) A preventative maintenance and monitoring program for the collection system;
 - (3) Description of sufficient staffing necessary to properly operate and maintain the sanitary sewer collection system and how the operation and maintenance program is staffed;
 - (4) Description of funding, the source(s) of funding and provisions for funding sufficient for implementing the plan;
 - (5) Identification of known and suspected overflows and back-ups, including manholes. A description of the cause of the identified overflows and back-ups, corrective actions taken, and a plan for addressing the overflows and back-ups consistent with the requirements of this permit;
 - (6) A description of the permittee's programs for preventing I/I related effluent violations and all unauthorized discharges of wastewater, including overflows and by-passes and the ongoing program to identify and remove sources of I/I. The program shall include an inflow identification and control program that focuses on the disconnection and redirection of illegal sump pumps and roof down spouts;
 - (7) An educational public outreach program for all aspects of I/I control, particularly private inflow; and
 - (8) An Overflow Emergency Response Plan to protect public health from overflows and unanticipated bypasses or upsets that exceed any effluent limitation in the permit.

6. Annual Reporting Requirement

The permittee and co-permittees shall each submit a summary report of activities related to the implementation of its Collection System O & M Plan during the previous calendar year. The report shall be submitted to EPA and MassDEP **annually by April 30**. The summary report shall, at a minimum, include;

- a. A description of the staffing levels maintained during the year;
- b. A map and a description of inspection and maintenance activities conducted and corrective actions taken during the previous year;

- c. Expenditures for any collection system maintenance activities and corrective actions taken during the previous year;
- d. A map with areas identified for investigation/action in the coming year;
- e. If treatment plant flow has reached 80% of its design flow [53.6 mgd] based on the annual average flow during the reporting year, or there have been capacity related overflows, submit a calculation of the maximum daily, weekly, and monthly infiltration and the maximum daily, weekly, and monthly inflow for the reporting year; and
- f. A summary of unauthorized discharges during the past year and their causes and a report of any corrective actions taken as a result of the unauthorized discharges reported pursuant to the Unauthorized Discharges section of this permit.

E. ALTERNATE POWER SOURCE

In order to maintain compliance with the terms and conditions of this permit, the permittee and co-permittee shall provide an alternate power source with which to sufficiently operate the wastewater facility, as defined at 40 C.F.R. § 122.2, which references the definition at 40 C.F.R. § 403.3(q).

F. 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, including EPA regulations promulgated at 40 CFR §503, which prescribe "Standards for the Use or Disposal of Sewage Sludge" pursuant to Section 405(d) of the CWA, 33 U.S.C. §1345(d).
- 2. If both state and federal requirements apply to the permittee's sludge use and/or disposal practices, the permittee shall comply with the more stringent of the applicable requirements.
- 3. The requirements and technical standards of 40 CFR §503 apply to the following sludge 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 the placement of sewage sludge in a sludge only incinerator.
- 4. The requirements of 40 CFR §503 do not apply to facilities which dispose of sludge in a municipal solid waste landfill. 40 CFR §503.4. These requirements also do not apply to facilities which do not use or 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 40 CFR. Part 503 requirements including the following elements:

- General requirements
- Pollutant limitations
- Operational Standards (pathogen reduction and vector attraction reduction requirements)
- Management practices
- Record keeping
- Monitoring
- Reporting

Which of the 40 CFR §503 requirements apply to the permittee will depend upon the use or disposal practice followed and upon the quality of material produced by a facility. The EPA Region 1 Guidance document, "EPA Region 1 - NPDES Permit Sludge Compliance Guidance" (November 4, 1999), may be used by the permittee to assist it in determining the applicable requirements.¹

6. The sludge shall be monitored for pollutant concentrations (all Part 503 methods), pathogen reduction (land application and surface disposal) 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

Sampling of the sewage sludge shall use the procedures detailed in 40 CFR §503.8.

- 7. Under 40 CFR §503.9(r), the permittee is a "person who prepares sewage sludge" because it "is … the person who generates sewage sludge during the treatment of domestic sewage in a treatment works …." If the permittee contracts with *another* "person who prepares sewage sludge" under 40 CFR §503.9(r) i.e., with "a person who derives a material from sewage sludge" for use or disposal of the sludge, then compliance with Part 503 requirements is the responsibility of the contractor engaged for that purpose. If the permittee does not engage a "person who prepares sewage sludge," as defined in 40 CFR §503.9(r), for use or disposal, then the permittee remains responsible to ensure that the applicable requirements in Part 503 are met. 40 CFR §503.7. If the ultimate use or disposal method is land application, the permittee is responsible for providing the person receiving the sludge with notice and necessary information to comply with the requirements of 40 CFR Part 503 Subpart B.
- 8. The permittee shall submit an annual report containing the information specified in the 40 CFR Part 503 requirements (§503.18 (land application), §503.28 (surface disposal), or §503.48 (incineration)) by <u>February 19th</u> (see also "EPA Region 1 NPDES Permit Sludge Compliance Guidance"). The permittee shall submit an annual report containing the information specified in the 40 CFR Part 503 requirements (§ 503.18 (land application), § 503.28 (surface disposal), or § 503.48 (incineration)) by February 19 (see also "EPA Region 1 NPDES Permit Sludge

¹ This guidance document is available upon request from EPA Region 1 and may also be found at: http://www.epa.gov/region1/npdes/permits/generic/sludgeguidance.pdf

Compliance Guidance"). Reports shall be submitted electronically using EPA's Electronic Reporting tool ("NeT") (see "Monitoring and Reporting" section below). If the permittee engages a contractor or contractors for sludge preparation and ultimate use or disposal, the annual report need contain only the following information:

- a. Name and address of contractor(s) responsible for sludge preparation, use or disposal
- b. Quantity of sludge (in dry metric tons) from the POTW that is transferred to the sludge contractor(s), and the method(s) by which the contractor will prepare and use or dispose of the sewage sludge.

G. INDUSTRIAL USERS AND PRETREATMENT PROGRAM

- 1. 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 (see Attachment C - Reassessment of Technically Based Industrial Discharge Limits) 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. 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 and maintain adequate records.
 - 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 (12) 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 D (NPDES Permit Requirement for Industrial Pretreatment Annual Report) of this permit and shall be submitted no later than March 31st 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 necessary, 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 Part I.E.1.

H. SPECIAL CONDITIONS

- 1. Nitrogen
 - a. The Permittee shall continue to optimize the treatment facility operations relative to total nitrogen ("TN") removal through continued ammonia removal, maximization of solids retention time while maintaining compliance with BOD5 and TSS limits, and/or other operational changes designed to enhance the removal of nitrogen in order to maintain the annual average mass discharge of total nitrogen at less than the existing mass loading of 2,279 lbs/day.
 - b. The permittee shall submit an annual report to EPA and the MassDEP by **February 1st** of 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 calendar year. If, in any year, the treatment facility discharges in excess of 2,279 lbs/day TN on an annual average basis, the annual report shall include a detailed explanation of the reasons why

TN discharges have increased, including any changes in influent flows/loads and any operational changes. The report shall also include all supporting data.

c. <u>Annually, no later than April 30th</u>, the permittee shall submit a report evaluating the impact of CSO abatement projects on nitrogen loads discharged from the WWTF. The report shall include a comparison of 2012-2016 conditions with conditions as of the date of the report with respect to the volume of sanitary sewage and of stormwater discharged through CSOs and through the WWTF. The report shall also include the expected change in volume and nitrogen load from the WWTF from sanitary sewage and stormwater flows in connection with CSO mitigation projects not included in the analysis of conditions as of the report date, but expected to be completed within the following five years.

I. MONITORING AND REPORTING

The monitoring program in the permit specifies sampling and analysis, which will provide continuous information on compliance and the reliability and effectiveness of the installed pollution abatement equipment. The approved analytical procedures found in 40 CFR Part 136 are required unless other procedures are explicitly required in the permit. The Permittee is obligated to monitor and report sampling results to EPA and the MassDEP within the time specified within the permit.

Unless otherwise specified in this permit, the permittee shall submit reports, requests, and information and provide notices in the manner described in this section.

The permittee may consolidate reporting information which are on similar reporting schedules, in order to reduce or eliminate redundancy.

1. Submittal of DMRs Using NetDMR

The permittee shall continue to submit its monthly monitoring data in discharge monitoring reports (DMRs) to EPA and MassDEP no later than the 15th day of the month electronically using NetDMR. When the permittee submits DMRs using NetDMR, it is not required to submit hard copies of DMRs to EPA or MassDEP.

2. Submittal of Reports as NetDMR Attachments

Unless otherwise specified in this permit, the permittee shall electronically submit all reports to EPA as NetDMR attachments rather than as hard copies. Permittees shall continue to send hard copies of reports other than DMRs to MassDEP until further notice from MassDEP. (See Part I.E.5. for more information on state reporting.) Because the due dates for reports described in this permit may not coincide with the

due date for submitting DMRs (which is no later than the 15th day of the month), a report submitted electronically as a NetDMR attachment shall be considered timely if it is electronically submitted to EPA using NetDMR.

3. Submittal of Pre-treatment Related Reports

All reports and information required of the permittee in the Industrial Users and Pretreatment Program section of this permit shall be submitted to the Office of Ecosystem Protection's Pretreatment Coordinator in Region 1 EPA's Office of Ecosystem Protection (OEP). These requests, reports and notices include:

- A. Annual Pretreatment Reports,
- B. Pretreatment Reports Reassessment of Technically Based Industrial Discharge Limits Form,
- C. Revisions to Industrial Discharge Limits,
- D. Report describing Pretreatment Program activities, and
- E. Proposed changes to a Pretreatment Program

This information shall be submitted to EPA/OEP as a hard copy at the following address:

U.S. Environmental Protection Agency Office of Ecosystem Protection Regional Pretreatment Coordinator 5 Post Office Square - Suite 100 (OEP06-03) Boston, MA 02109-3912

4. Submittal of Biosolids/Sewage Sludge Reports

By **February 19** of each year, the permittee must electronically report their annual Biosolids/Sewage Sludge Report for the previous calendar year using EPA's NPDES Electronic Reporting Tool found on the internet at https://www.epa.gov/compliance/npdes-ereporting.

5. Submittal of Requests and Reports to EPA/OEP

The following requests, reports, and information described in this permit shall be submitted to the EPA/OEP NPDES Applications Coordinator in the EPA Office Ecosystem Protection (OEP).

- A. Transfer of Permit notice
- B. Request for changes in sampling location
- C. Request for reduction in testing frequency
- D. Request for reduction in WET testing requirement
- E. Report on unacceptable WET dilution water / request for alternative dilution water.

These reports, information, and requests shall be submitted to EPA/OEP electronically at <u>R1NPDESNotices.OEP@epa.gov</u> or by hard copy mail to the following address:

U.S. Environmental Protection Agency Office of Ecosystem Protection EPA/OEP NPDES Applications Coordinator 5 Post Office Square – Suite 100 (OEP06-03) Boston, MA 02109-3912

6. Submittal of Reports in Hard Copy Form

The following notifications and reports shall be submitted as hard copy with a cover letter describing the submission. These reports shall be signed and dated originals submitted to EPA.

- A. Written notifications required under Part II
- B. Notice of unauthorized discharges, including Sanitary Sewer Overflow (SSO) reporting
- C. CSO Public Notification Plan
- D. Collection System Operation and Maintenance Plan
- E. Report on annual activities related to O&M Plan

This information shall be submitted to EPA/OES at the following address:

U.S. Environmental Protection Agency Office of Environmental Stewardship (OES) Water Technical Unit 5 Post Office Square, Suite 100 (OES04-SMR) Boston, MA 02109-3912

7. State Reporting

Unless otherwise specified in this permit, duplicate signed copies of all reports, information, requests or notifications described in this permit, including the reports, information, requests or notifications described in Parts I.F.3., I.F.4. and I.F.5. also shall be submitted to the State at the following addresses:

MassDEP – Western Region Bureau of Water Resources 436 Dwight Street, Suite 402 Springfield, MA 01103

Copies of toxicity tests and nitrogen optimization reports only shall be submitted to:

Massachusetts Department of Environmental Protection Watershed Planning Program 8 New Bond Street Worcester, MA 01606

6. Verbal Reports and Verbal Notifications

Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, shall be made to both EPA and to MassDEP. This includes verbal reports and notifications which require reporting

within 24 hours. (As examples, see Part II.B.4.c. (2), Part II.B.5.c. (3), and Part II.D.1.e.) Verbal reports and verbal notifications shall be made:

EPA's Office of Environmental Stewardship: 617-918-1510

and to

MassDEP's Emergency Response: 888-304-1133.

J. STATE PERMIT CONDITIONS

- 1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are: (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state surface water discharge permit issued by the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP) pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§26-53, and 314 CMR 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.
- 2. This authorization also incorporates the state water quality certification issued by MassDEP under §401(a) of the Federal Clean Water Act, 40 CFR 124.53, M.G.L.c.21, §27 and 314 CMR 3.07. All of the requirements (if any) contained in MassDEP's water quality certification for the permit are hereby incorporated by reference into this state surface water discharge permit as special conditions pursuant to 314 CMR 3.11.
- 3. Each Agency will have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit will be effective only with respect to the Agency taking such action, and will 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 will 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 will remain in full force and effect under State law as a permit issued by the Commonwealth of Massachusetts.