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

The City of Taunton Department of Public Works

is authorized to discharge from the facility located at

Taunton Wastewater Treatment Plant 825 West Water Street Taunton, MA 02780 and one combined sewer overflow (CSO)

to receiving water named Taunton River (Taunton River Basin - MA62-02)

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

The Towns of Raynham and Dighton are co-permittees for PART 1.B. UNAUTHORIZED DISCHARGES and PART 1.C. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM, which include conditions regarding the operation and maintenance of the collection systems owned and operated by the Towns. The responsible Town authorities are:

Town of Raynham Sewer Dept	Town of Dighton Sewer Dept
416 Titicut Road	P.O. Box 229
Raynham, MA 02767	North Dighton, MA 02764

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 expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on March 27, 2001.

This permit consists of 23 pages in Part I including effluent limitations and monitoring requirements, Attachments A (USEPA Region 1 Freshwater Chronic Toxicity Test Procedure and Protocol, March 2013), B (Freshwater Acute Toxicity Test Procedure and Protocol, February 2011), C (Reassessment of Technically Based Industrial Discharge Limits) and D (NPDES Permit Requirement For Industrial Pretreatment Annual Report), and Part II General Conditions and Definitions.

Signed this O day of April, 2015

Ken Moraff, Acting Director Office of Ecosystem Protection Environmental Protection Agency Boston, MA

David Ferris, Director Massachusetts Wastewater Management Program Department of Environmental Protection Commonwealth of Massachusetts Boston, MA PART I

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A.1. During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge treated industrial and sanitary wastewater from outfall serial number 001 to the Taunton River. Such discharges shall be limited and monitored as specified below.							
EFFLUENT CHARACTERISTIC	EFFLUENT LIMITS					MONITORING REQUIREMENTS ³	
PARAMETER	AVERAGE MONTHLY	AVERAGE <u>WEEKLY</u>	AVERAGE MONTHLY	AVERAGE <u>WEEKLY</u>	MAXIMUM <u>DAILY</u>	MEASUREMENT FREQUENCY	SAMPLE TYPE
FLOW ²	*****	*****	8.4 MGD	****	Report MGD	CONTINUOUS	RECORDER
FLOW ²	*****	*****	Report MGD	*****	*****	CONTINUOUS	RECORDER
CBOD ₅ ⁴ (April 1-October 31)	1051 lbs/Day	1051 lbs/Day	15 mg/l	15 mg/l	Report mg/l	3/WEEK	24-HOUR COMPOSITE ⁵
CBOD ₅ ⁴ (November 1 - March 31)	2102 lbs/Day	3153 lbs/Day	30 mg/l	45 mg/l	Report mg/l	3/WEEK	24-HOUR COMPOSITE ⁵
TSS ⁴ (April 1-October 31)	1401 lbs/Day	1401 lbs/Day	20 mg/l	20 mg/l	Report mg/l	3/WEEK	24-HOUR COMPOSITE ⁵
TSS ⁴ (November 1 - March 31)	2102 lbs/Day	3153 lbs/Day	30 mg/l	45 mg/l	Report mg/l	3/WEEK	24-HOUR COMPOSITE ⁵
pH RANGE ¹		6.0 - 8.5 SU (SEE PERMIT PARAGRAPH I.A.1.b.)				1/DAY	GRAB
TOTAL RESIDUAL CHLORINE ⁷	*****	*****	27 ug/l	*****	47 ug/l	3/DAY	GRAB
FECAL COLIFORM ^{1,6}	****	*****	88 cfu/100 ml	*****	260 cfu/100 ml	2/WEEK	GRAB
ENTEROCOCCI ^{1,6}	*****	****	35 cfu/100 ml	*****	276 cfu/100 ml	2/WEEK	GRAB
AMMONIA-NITROGEN (June 1 - September 30)	Report lbs/Day	Report lbs/Day	1 mg/l	1 mg/l	2 mg/l	3/WEEK	24-HOUR COMPOSITE ⁵
AMMONIA-NITROGEN (October 1 - May 31)	Report lbs/Day	****	Report mg/l	*****	Report mg/l	1/MONTH	24-HOUR COMPOSITE ⁵

Sampling Location: 24-hour composite sampling at head of aeration cascade; grab samples at foot of aeration cascade.

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CONTINUED FROM PREVIOUS PAGE

A.1.

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

EFFLUENT CHARACTERISTIC	UENT CHARACTERISTIC EFFLUENT LIMITS				MONITORING REQUIREMENTS ³		
PARAMETER	AVERAGE <u>MONTHLY</u>	AVERAGE <u>WEEKLY</u>	AVERAGE MONTHLY	AVERAGE <u>WEEKLY</u>	MAXIMUM DAILY	MEASUREMENT <u>FREQUENCY</u>	SAMPLE <u>TYPE</u>
TOTAL NITROGEN ^{12, 13} (May 1 - October 31) TOTAL KJELDAHL NITROGEN TOTAL NITRATE TOTAL NITRITE	210 lbs/day Report lbs/day Report lbs/day Report lbs/day	*****	Report mg/l Report mg/l Report mg/l Report mg/l	****	Report mg/l	3/WEEK	24-HOUR COMPOSITE
TOTAL NITROGEN ^{12, 13} (November 1 - April 30) TOTAL KJELDAHL NITROGEN TOTAL NITRATE TOTAL NITRITE	Report lbs/day Report lbs/day Report lbs/day Report lbs/day	*****	Report mg/l Report mg/l Report mg/l Report mg/l	*****	Report mg/l	1/WEEK	24-HOUR COMPOSITE
TOTAL PHOSPHORUS (April 1 - October 31)	Report lbs/day	****	Report mg/l	****	Report mg/l	1/WEEK	24-HOUR COMPOSITE ⁵
TOTAL RECOVERABLE COPPER ¹⁴	*****	****	0.008 mg/l	****	0.016 mg/l	1/MONTH	24-HOUR COMPOSITE ⁵
DISSOLVED OXYGEN (April 1 st -October 31 st)	NOT LESS THAN 6.0 mg/l					1/DAY	GRAB
WHOLE EFFLUENT TOXICITY ^{8, 9, 10, 11}	Acute $LC_{50} \ge 100\%$ Chronic C-NOEC $\ge 29\%$					4/YEAR	24-HOUR COMPOSITE ⁵
Hardness ¹⁵	*****	****	*****	*****	Report mg/l	4/YEAR	24-HR COMP
Ammonia Nitrogen as N ¹⁵	*****	****	*****	****	Report mg/l	4/YEAR	24-HR COMP
Total Recoverable Aluminum ¹⁵	*****	*****	*****	****	Report mg/l	4/YEAR	24-HR COMP
Total Recoverable Cadmium ¹⁵	****	*****	*****	*****	Report mg/l	4/YEAR	24-HR COMP
Total Recoverable Copper ¹³	*****	*****	****	***	Report mg/l	4/YEAR	24-HR COMP
Total Recoverable Nickall ⁵	*****	*****	***	*****	Report mg/l	4/YEAR	24-HR COMP
Total Recoverable Zinc ¹⁵	****	*****	*****	*****	Report mg/l	4/YEAK	24-HK COMP
					Inchore make	4/IEAK	24-IIK CUIVIP

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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. Effluent sampling shall be of the discharge and shall be collected at the point specified on page 2. Any change in sampling location must be reviewed and approved in writing by EPA and MassDEP.

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.

- 4. Sampling required for influent and effluent.
- 5. 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.
- 6. The monthly average limits for fecal coliform and enterococci are expressed as a geometric mean. Fecal coliform and enterococci monitoring shall be conducted concurrently with a total residual chlorine sample.
- 7. 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.

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.

Chlorination and dechlorination systems shall include an alarm system for indicating system interruptions or malfunctions. Any interruption or malfunction of the chlorine

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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.

The permittee shall conduct chronic and 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, <u>Ceriodaphnia dubia</u>, only. Toxicity test samples shall be collected during the months of February, May, August and November. The test results shall be submitted by the last day of the month following the completion of the test. The results are due March 31, June 30, September 30 and December 31, respectively. The chronic test must be performed in accordance with test procedures and protocols specified in **Attachment A** of this permit. The acute test must be performed in accordance with test procedures and protocols specified in **Attachment B** of this permit.

Test Dates Second Week in	Submit Results By:	Test Species	Acute Limit LC50	Chronic Limit C-NOEC
February May August November	March 31 June 30 September 30 December 31	<u>Ceriodaphnia</u> <u>dubia</u> (daphnid)	≥100%	≥29%

After submitting **one year** and a **minimum** of four consecutive sets of WET test results, 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.

- 9. 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.
- 10. 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, based on a statistically significant difference from dilution control, at a specific time of observation as determined from hypothesis testing. As described in the EPA *WET*

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Method Manual EPA 821-R-02-013, Section 10.2.6.2, all test results are to be reviewed and reported in accordance with EPA guidance on the evaluation of the concentrationresponse relationship. The "29% or greater" limit is defined as a sample which is composed of 29% (or greater) effluent, the remainder being dilution water.

- 11. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall either follow procedures outlined in Attachment A (Toxicity Test Procedure and Protocol) Section IV., DILUTION WATER in order to obtain an individual approval for use of an alternate dilution water, or the permittee shall follow the <u>Self-Implementing Alternative Dilution Water Guidance</u>, 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 NPDES Program Instructions for the Discharge Monitoring Report Forms (DMRs), which may be found on the EPA Region I web site at http://www.epa.gov/Region1/enforcementandassistance/dmr.html. If this guidance is revoked, the permittee shall revert to obtaining individual approval as outlined in Attachment A. Any modification or revocation to this guidance will be transmitted to the permittees. However, at any time, the permittee may choose to contact EPA-New
- 12. The nitrogen limit is a rolling seasonal average limit, which is effective from May 1– October 31 of each year. The first value for the seasonal average will be reported after an entire May – October period has elapsed following the effective date of the permit (results do not have to be from the same year). For example, if the permit becomes effective on December 1, 2014, the permittee will calculate the first seasonal average from samples collected during the months of May through October 2015, and report this average on the October 2014 DMR. For each subsequent month that the seasonal limit is in effect, the seasonal average shall be calculated using samples from that month and the previous five months that the limit was in effect.

England directly using the approach outlined in Attachment A.

The permittee shall comply with the 210 lbs/day total nitrogen limit (and the optimization requirement of footnote 13) in accordance with the schedule contained in Section G below. Upon the effective date of the permit, and until the date specified in Section G below for completion of the Phase 1 upgrade, monitoring for total nitrogen shall be conducted once per week.

- 13. The permittee shall operate the treatment facility to reduce the discharge of total nitrogen during the months of November to April to the maximum extent possible. All available treatment equipment in place at the facility shall be operated unless equal or better performance can be achieved in a reduced operational mode. The addition of a carbon source that may be necessary in order to meet the total nitrogen limit during the months of May to October is not required during the months of November to April.
- 14. The minimum level (ML) for copper is defined as 3 ug/l. This value is the minimum

level for copper using the Furnace Atomic Absorption analytical method (EPA Method 220.2). This method or other EPA-approved method with an equivalent or lower ML shall be used.

15. For each whole effluent toxicity test the permittee shall report on the appropriate discharge monitoring report (DMR), the concentrations of the hardness, ammonia, 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 **Attachment A**. 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 6.0 or greater than 8.5 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 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 results of sampling for any parameter done 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, the permittee shall submit a report to MassDEP by March 31 of the following calendar year describing its plans for further flow increases and describing how it will maintain compliance with the 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 the 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

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- 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.
- 3. Prohibitions Concerning Interference and Pass Through:
 - 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.
- 4. 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.
- 5. 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.

B. UNAUTHORIZED DISCHARGES

This permit authorizes discharges only from the outfall listed in Part I.A.1 and one CSO located on West Water Street, in accordance with the terms and conditions of this permit. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs), are not authorized by this permit and 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 (Paragraph D.1.e of Part II of this permit). Notification of SSOs to MassDEP shall be made on its SSO Reporting Form (which includes MassDEP Regional Office telephone numbers). The reporting form and instruction for its completion may be found on-line at

http://www.mass.gov/eea/agencies/massdep/service/approvals/sanitary-sewer-overflow-bypass-backup-notification.html.

C. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

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

1. Maintenance Staff

The permittee shall provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit. Provisions to meet this requirement shall be described in the Collection System O & M Plan required pursuant to Section C.5. below.

2. Preventive Maintenance Program

The permittee shall maintain an ongoing preventive 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. Plans and programs to meet this requirement shall be described in the Collection System O & M Plan required pursuant to Section C.5. below.

3. Infiltration/Inflow

The permittee shall 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 C.5. below.

4. Collection System Mapping

Within 30 months of the effective date of this permit, the permittee shall prepare a map of the 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

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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, and the direction of flow.
- 5. Collection System Operation and Maintenance Plan

The permittee shall develop and implement a Collection System Operation and Maintenance Plan.

- a. Within six (6) months of the effective date of the permit, the permittee shall submit to EPA and MassDEP:
 - (1) A description of the collection system management goals, 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 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 this permit. The Plan shall include:
 - (1) The required submittal from paragraph 5.a. above, updated to reflect current information;

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- (2) A preventive 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 <u>Overflow Emergency Response Plan</u> 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 shall 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 March 31. 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 (6.7 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.

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7. Alternate Power Source

In order to maintain compliance with the terms and conditions of this permit, the permittee shall provide an alternative power source(s) sufficient to operate the portion of the publicly owned treatment works¹ it owns and operates.

D. 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 Part 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 Part 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 in a sludge only incinerator
- 4. The requirements of 40 CFR Part 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 requirements and vector attraction reduction requirements)
 - Management practices
 - Record keeping

¹ As defined at 40 CFR §122.2, which references the definition at 40 CFR §403.3

- Monitoring
- Reporting

Which of the 40 CFR Part 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.²

6.

The sludge shall be monitored for pollutant concentrations (all Part 503 methods) and pathogen reduction and vector attraction 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

1/ year
1/quarter
6/year
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 **February 19** (see also "EPA Region 1 NPDES Permit Sludge Compliance Guidance"). Reports shall be submitted to the address contained in the reporting section of the permit. 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:

² This guidance document is available upon request from EPA Region 1 and may also be found at: <u>http://www.epa.gov/region1/npdes/permits/generic/sludgeguidance.pdf</u>

- 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.

E. 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 (Attachment C) 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.

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- 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 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 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.

F. COMBINED SEWER OVERFLOWS (CSOs)

1. Effluent Limitations

During wet weather, the permittee is authorized to discharge storm water/wastewater from the combined sewer overflow located on West Water Street, subject to the following effluent limitations:

a. The discharges shall receive treatment at a level providing Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant

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Control Technology (BCT) to control and abate conventional pollutants and Best Available Technology Economically Achievable (BAT) to control and abate nonconventional 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 and detailed further in Part I.F.2, "Nine Minimum Controls Minimum Implementation Levels" 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; and
- (9) Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.
- b. Within 6 months of the effective date of this permit, the permittee shall submit to EPA updated documentation on its implementation of the Nine Minimum Controls. Implementation of the Nine Minimum Controls is required by the effective date of the permit. EPA and MassDEP consider that approvable documentation must include the minimum requirements set forth in Part I.F.2 of this permit and additional activities the permittee can reasonably undertake.
- c. The discharges shall not cause or contribute to violations of federal or state Water Quality Standards.
- 2. Nine Minimum Controls Minimum Implementation Levels
 - a. The permittee must implement the nine minimum controls in accordance with the

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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 and tidal surcharging (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 (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 may be through direct measurement or estimation. When estimating, the permittee shall make reasonable efforts, i.e. gauging or measurements, to verify the validity of the estimation technique. The following information must be recorded for each combined sewer outfall for each discharge event:
 - Estimated duration (hours) of discharge;
 - Estimated volume (gallons) of discharge;
 - National Weather Service precipitation data from the nearest gage

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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.

Annually, no later than April 30th, the permittee shall submit a report containing the required discharge monitoring information for all combined sewer discharges during the previous calendar year.

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:

CITY OF TAUNTON 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 languages other than English or add a universal wet weather sewage discharge symbol to existing signs based on notification from the EPA and the State or on the permittee's own good faith determinations that the primary language of a substantial percentage of the residents in the vicinity of a given outfall structure is not English.

3. Nine Minimum Controls Reporting Requirement

f.

Annually, no later than April 30th, 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 frequency, duration, and volume of discharges from each CSO.

G. TOTAL NITROGEN COMPLIANCE SCHEDULE

1. Ten (10) years from the effective date of the permit, the 210 lbs/day seasonal rolling average

total nitrogen limit shall become effective.³

- 2. Within one (1) year of the effective date of the permit, the permittee shall report on progress made towards completing design of a treatment plant upgrade to achieve an interim monthly average 5 mg/l total nitrogen limit or less in a manner that is consistent with a further upgrade to 3 mg/l ("Phase 1 Upgrade").
- 3. Within two (2) years of the effective date of the permit, the permittee shall complete facilities planning and initiate the design of the Phase 1 Upgrade. This period for facilities planning is designed to allow time for the permittee to evaluate the effect of peak wet weather flows and other factors relative to design considerations in order to ensure that the waste water treatment facility upgrade will be able to attain all permit limits.
- 4. Within (3) years of the effective date of the permit, the permittee shall complete design of the Phase 1 upgrade and initiate construction of the Phase 1 upgrade.
- 5. Within five (5) years of the effective date of permit, the permittee shall complete construction of the Phase 1 Upgrade, optimize total nitrogen removal, including the addition of supplemental carbon, and achieve compliance with the interim monthly average limit of 5 mg/l TN or less.
- 6. Annually, beginning one year from the effective date of the permit, the permittee shall submit progress reports that detail the following:
 - a. Status of compliance with the above schedule, and
 - b. All nitrogen-related water quality data collected and water quality analyses completed during the previous year.
- 7. If at any time the permittee believes it has sufficient new information to justify a revision of the total nitrogen limit, it may submit the information to EPA and MADEP and the agencies will review the information and, if appropriate, act on a request for a permit modification if there exists "cause" under 40 CFR § 124.62 or incorporate the information in a new water quality-based permit limit analysis as part of permit reissuance.

H. 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

³ Antibacksliding prohibitions with respect to the final effluent limitation of 210 lbs/day are not triggered until the WQBEL in the permit goes into effect. Therefore, the WQBEL can be relaxed, if justified, at any time prior to the end of the compliance schedule without triggering antibacksliding prohibition with respect to that limit.

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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.

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.G.6. 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 with the next DMR due following the particular report due date specified in this permit.

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)

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Boston, MA 02109-3912

4. 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 dilution water / request for alternative dilution water for WET testing

These reports, information, and requests shall be submitted to EPA/OEP electronically at <u>R1NPDES.Notices.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

5. 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. Collection System Operation and Maintenance Plan (from co-permittee)
- D. Report on annual activities related to O&M Plan (from co-permittee)

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

U.S. Environmental Protection Agency Office or Environmental Stewardship (OES) Water Technical Unit 5 Post Office Square, Suite 100 (OES04-4) Boston, MA 02109-3912

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6. 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.G.3, I.G.4, and I.G.5 also shall be submitted to the State at the following addresses:

MassDEP – Southeast Region Bureau of Resource Protection (Municipal) 20 Riverside Drive Lakeville, MA 02347

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

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

7. 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 to EPA's Office of Environmental Stewardship at:

> U.S. Environmental Protection Agency Office of Environmental Stewardship 5 Post Office Square, Suite 100 (OES04-4) Boston, MA 02109-3912 617-918-1510

I. STATE PERMIT CONDITIONS

 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 C.M.R. 3.00. All of the requirements contained in this authorization, as well as the standard conditions

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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 C.F.R. 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 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 a NPDES Permit is declared invalid, illegal or otherwise.