

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPA NEW ENGLAND OFFICE
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES.

NPDES PERMIT NO.: MA0100765

NAME AND ADDRESS OF APPLICANT:

William Fitzgerald, Supervisor
Fairhaven Water Pollution Control Facility
Arsene Street
Fairhaven, MA 02719

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Fairhaven Water Pollution Control Facility
Arsene Street
Fairhaven, MA 02719

RECEIVING WATER: Acushnet River (New Bedford Inner Harbor), Buzzards Bay Watershed
(MA 95-42).

CLASSIFICATION: SB

I. Proposed Action, Type of Facility, and Discharge Location.

The above named applicant has requested that the U.S. Environmental Protection Agency (EPA) re-issue its NPDES permit to discharge into the designated receiving water. **Attachment A** shows the locations of the outfall and the wastewater treatment facility. The facility is engaged in collection and treatment of domestic wastewater. The discharge is from a secondary wastewater treatment facility.

The Town of Fairhaven owns and operates a 5 million gallon per day (MGD) activated sludge wastewater treatment facility. Wastewater treatment includes preliminary, primary and secondary processes. Final effluent is disinfected using ultraviolet rays and is discharged to the Acushnet River. Sludge is sent off-site to Woonsocket, RI for incineration.

The segment of the Acushnet River receiving the Fairhaven discharge (New Bedford Inner

Harbor) is classified as SB. The designated uses for SB waters include: habitat for fish, other aquatic life, and wildlife, and for primary and secondary contact recreation, and shall have consistently good aesthetic value. Where designated, SB waters shall be suitable for shellfish harvesting with depuration.

The Massachusetts Year 2008 Integrated List of Waters lists the receiving water (New Bedford Inner Harbor, Coggeshall Street Bridge to hurricane barrier, Fairhaven/New Bedford) as a Category 5 water, not achieving water quality standards and requiring a total maximum daily load (TMDL). The water is listed for priority organics, metals, nutrients, organic enrichment/low DO, pathogens, oil and grease, taste, odor and color, and objectionable deposits.

II. Description of Discharge.

A quantitative description of the discharge in terms of significant effluent parameters, based on Discharge Monitoring Reports (DMRs) from January 2006 to February 2008, is shown on **Attachment B**.

III. Limitations and Conditions.

The effluent limitations and the monitoring requirements may be found in the draft NPDES permit.

IV. Permit Basis and Explanation of Effluent Limitation Derivation

EPA is required to consider technology and water quality requirements when developing permit effluent limits. Technology-based treatment requirements represent the minimum level of control that must be imposed under Section 402 and 301(b) of the Act. Section 301(b)(1)(B) requires that Publicly Owned Treatment Works achieve limits based on secondary treatment. Secondary treatment is defined at 40 CFR Section 133.102.

EPA regulations require NPDES permits to contain effluent limits more stringent than technology-based limits where more stringent limits are necessary to maintain or achieve federal or state water quality standards.

Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on water quality standards. The Massachusetts Surface Water Quality Standards include requirements for the regulation and control of toxic constituents and also require that EPA criteria, established pursuant to Section 304(a) of the CWA, shall be used unless site specific criteria is established.

The permit must limit any pollutant or pollutant parameter (conventional, non-conventional, toxic and whole effluent toxicity) that is or may be discharged at a level that caused, has reasonable potential to cause, or contributes to an excursion above any water quality criterion. An excursion occurs if the projected or actual in-stream concentrations exceed the applicable criterion. In determining reasonable potential, EPA considers existing controls on point and

non-point sources of pollution, variability to toxicity and where appropriate, the dilution of the effluent in the receiving water.

A permit may not be renewed, reissued or modified with less stringent limitations or conditions than those contained in the previous permit unless in compliance with the anti-backsliding requirements of the CWA.

EPA's anti-backsliding provisions are found in Section 402(o) and 303(d)(4) of the CWA, and in 40 CFR 122.44(l), restrict the relaxation of permit limits, standards, and conditions. Anti-backsliding provisions require that limits in the reissued permit must be at least as stringent as those of the previous permit, unless specific conditions are met.

A. Conventional Pollutants

Under Section 301(b)(1)(B) of the CWA, POTWs must have achieved effluent limitations based upon secondary treatment by July 1, 1977. The secondary treatment requirements are set forth at 40 CFR Part 133. The regulations describe the secondary treatment requirements for biochemical oxygen demand (BOD), total suspended solids (TSS), and pH. The "Average Monthly" and "Average Weekly" BOD and TSS limitations are based on the requirements of 40 CFR 133.102. Numerical limitations for pH and fecal coliform requirements are based on state certification requirements under Section 401(a)(1) of the CWA, as described in 40 CFR 124.53.

Monitoring frequency for BOD and TSS have been increased from 1/week to 3/week and monitoring frequency for bacteria has been increased from 1/week to 2/week to conform with requirements of similar wastewater treatment facilities.

New monitoring requirements and effluent limitations for enterococci are included in the draft permit based on water quality criteria recently adopted by MassDEP and approved by EPA.

B. Non-Conventional Pollutants

1. Toxics

a. Whole Effluent Toxicity

EPA's *Technical Support Document for Water Quality-based Toxics Control*, EPA/505/2-90-001, March 1991, recommends using an "integrated strategy" containing both pollutant (chemical) specific approaches and whole effluent (biological) toxicity approaches to control toxic pollutants in effluent discharges entering the nation's waterways. EPA-New England adopted this "integrated strategy" on July 1, 1991, for use in permit development and issuance. These approaches are designed to protect aquatic life and human health. Pollutant-specific approaches such as those in the Gold Book and State regulations address individual chemicals, whereas, the whole effluent toxicity (WET) approach evaluates interactions between pollutants thus rendering an "overall" or "aggregate" toxicity assessment of the effluent. Furthermore, WET measures the "additive" and/or "antagonistic" effects of individual chemical pollutants which pollutant specific approaches do not,

thus the need for both approaches. In addition, the presence of an unknown toxic pollutant can be discovered and addressed through this process.

Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on water quality standards. The Massachusetts Surface Water Quality Standards (314 CMR 4.00), include the narrative statement that "All surface waters shall be free from pollutants in concentrations and combinations that are toxic to humans, aquatic life or wildlife." 314 CMR 4.05(5)(e).

Federal NPDES regulations at 40 CFR §122.44(d)(1)(v) require whole effluent toxicity limits in a permit when a discharge has a "reasonable potential" to cause or contribute to an excursion above the State's narrative criterion for toxicity. WET tests of the Fairhaven WPCF's effluent show consistent compliance with effluent limitations, however the low dilution ratio (1:7.2) calculated for the discharge contributes to a "reasonable potential" that the discharge could cause an excursion of the no toxics provision in the State's regulations. Inclusion of the whole effluent toxicity limit in the Draft Permit will ensure compliance with the State's narrative water quality criterion of "no toxics in toxic amounts".

Moreover, the Massachusetts Department of Environmental Protection's Division of Watershed Management's toxics policy requires whole effluent toxicity testing for all major dischargers such as the Fairhaven POTW (Implementation Policy for the Control of Toxic Pollutants in Surface Waters, MassDEP 1990).

Therefore, based on the potential for toxicity from domestic contributions, the low level of dilution, water quality standards and in accordance with EPA and MassDEP regulation and policy, the draft permit includes acute and chronic effluent toxicity limitation and monitoring requirements. (See, e.g., "Policy for the Development of Water Quality-Based Permit Limitations for Toxic Pollutants: 50 Fed. Reg. 30,784 (July 24, 1985); see also, EPA's Technical Support Document for Water Quality-Based Toxic Control). The principal advantages of biological techniques are: (1) the effects of complex discharges of many known and unknown constituents can be measured only by biological analyses; (2) bioavailability of pollutants after discharge is best measured by toxicity testing; and (3) pollutants for which there are inadequate chemical analytical methods or criteria can be addressed.

The type of test (acute and/or chronic) and the effluent limitations are based on available dilution. The Draft Permit requires the permittee to perform acute toxicity tests twice per year using Inland Silverside and Sea Urchin and contains an LC50 limit of 100% effluent concentration. The LC50 is defined as the concentration of toxicant, or in this draft permit, as the percentage of effluent lethal to 50% of the test organisms during a specific length of time.

The Draft Permit also requires chronic tests twice per year using Inland Silverside and Sea Urchin and contains a Chronic-No Observed Effect Concentration (C-NOEC) limit of 14 percent. C-NOEC is defined as the highest concentration to which test organisms are exposed in a life cycle or partial life cycle test, which causes no adverse effect on growth, survival or reproduction during a specific time of observation. The C-NOEC limit was calculated as follows;

Chronic NOEC Limit Calculation:

$$\frac{1.0 * 100}{8.2} = 12.2\%$$

As a condition of this permit, the testing requirements may be reduced by a certified letter from the EPA. This permit provision anticipates that the permittee may wish to request a reduction in WET testing. After four consecutive WET tests, demonstrating compliance with the permit limits for whole effluent toxicity, the permittee may submit a written request to the EPA seeking a review of the toxicity test results. The EPA will review the test results and pertinent information to make a determination. The permittee is required to continue testing at the frequency and species specified in the permit until the permit is either formally modified or until the permittee receives a certified letter from the EPA indicating a change in the permit conditions.

b. Chlorine

In April 2004, the Town of Fairhaven completed construction of an ultraviolet light (U/V) disinfection system and has ceased using chlorine as a disinfectant. Accordingly, limitations and monitoring requirements for total residual chlorine have been removed from the permit.

c. Metals

Certain metals like copper, lead, cadmium and zinc can be toxic to aquatic life. EPA has evaluated (see below) the reasonable potential of toxicity on the concentration of metals in the effluent. Based on this evaluation EPA has determined that there is no reasonable potential for adverse impact on the aquatic life and no need to monitor and limit these metals.

Calculation of reasonable potential for copper, lead, zinc and cadmium:

All effluent metals data are taken from the Toxicity Test Reports from the period March 2004 to March 2008.

Total allowable Receiving Water Concentration, $C = \text{Criteria (Tot. Rec.)} \times \text{Dilution Factor/Conversion Factor}$

EPA 2002 National Recommended Water Quality Criteria for salt water and the dilution factor of 8.2 [calculated dilution ratio is 7.2:1 based on EPA approved UM Model with a discharge from a single 36 inches diameter port oriented at 90 degrees; dilution factor = $(7.2 + 1)/1 = 8.2$] are used to calculate effluent limits.

Copper: Chronic $C = 3.1 \times 8.2 / 0.83 = 30.6 \text{ ug/l}$ which is greater than the monthly average effluent concentration range of 10 - 20 ug/l. So, reasonable potential does not exist.

| | | |
|----------|---------|---|
| | Acute | $C = 4.8 \times 8.2 / 0.83 = 47.4 \text{ ug/l}$ which is greater than the maximum effluent concentration of 20 ug/l. So, reasonable potential does not exist. |
| Lead: | Chronic | $C = 8.1 \times 8.2 / 0.951 = 69.8 \text{ ug/l}$ which is greater than the monthly average effluent concentration range of 2.7 - 10 ug/l. So, reasonable potential does not exist. |
| | Acute | $C = 210 \times 8.2 / 0.951 = 1811 \text{ ug/l}$ which is greater than the maximum effluent concentration of 10 ug/l. So, reasonable potential does not exist. |
| Zinc: | Chronic | $C = 81 \times 8.2 / 0.946 = 702 \text{ ug/l}$ which is far greater than the monthly average effluent concentration range of 12 - 50 ug/l. So, reasonable potential does not exist. |
| | Acute | $C = 90 \times 8.2 / 0.946 = 780 \text{ ug/l}$ which is far greater than the maximum effluent concentration of 50 ug/l. So, reasonable potential does not exist. |
| Cadmium: | Chronic | $C = 9.3 \times 8.2 / 0.994 = 76.7 \text{ ug/l}$ which is greater than the monthly average effluent concentration of 0.5 - 10 ug/l. So, reasonable potential does not exist. |
| | Acute | $C = 42 \times 8.2 / .994 = 346 \text{ ug/l}$ which is far greater than the maximum effluent concentration of 10 ug/l. So, reasonable potential does not exist. |

2. Nutrients

a. Nitrogen

As described earlier, the receiving water is listed as impaired due to, among other things, nutrients, organic enrichment/low DO, taste, odor and color, and objectionable deposits. Numerous studies, as summarized below, have identified nitrogen enrichment as causing or contributing to these impairments. Excessive nitrogen causes algae blooms that deplete dissolved oxygen, causes visible color and turbidity, and ultimately decay causing objectionable odors and oxygen demanding sediments.

The current permit required the Town to evaluate and implement optimization of nitrogen removal processes at the WPCF. In November 2004, the Town completed a Draft Nitrogen Removal Optimization Study which evaluated influent nitrogen loadings and control options, and also evaluated the practicable extent to which nitrogen removal at the existing treatment facility could be further optimized. The study found that during the period from July 2000 to July

2004, the total nitrogen (TN) concentration in the treatment plant influent ranged from 11 to 53 mg/l with an average concentration of 29 mg/l. For the same period, TN in the effluent ranged between 5 to 22 mg/l with an average concentration of 13 mg/l. This translates to an average removal efficiency of 55%. The study concluded that with some operational changes, this efficiency could be improved to 70%. At an influent concentration of 29 mg/l and a removal rate of 70 %, the resulting effluent concentration would be about 9 mg/l.

Recent discharge monitoring reports (DMRs) for the months of January 2006 to February 2008 show an average effluent TN concentration of 15.3 mg/l, suggesting that the operational changes were not implemented.

Past Studies

The final Buzzards Bay Comprehensive Conservation and Management Plan dated August 1991, identified nitrogen loading as one of the most serious problems threatening many embayments around Buzzards Bay.

In 1994, the Buzzards Bay Project published a draft report titled “ A Buzzards Bay Embayment Sub-watershed Evaluation: Establishing Priorities for Nitrogen Management Action”. This report highlighted the major sources of nitrogen to New Bedford Inner Harbor and all other Buzzards Bay embayments. The report identified the Fairhaven wastewater treatment plant as the major source of nitrogen to the Inner Harbor.

On March 6, 1998 a refined evaluation of nitrogen loading and water quality of New Bedford Inner Harbor (Acushnet River) as it relates to the Fairhaven wastewater treatment facility was completed by the Buzzards Bay Project. The report concluded that the Fairhaven wastewater plant is the single largest source of nitrogen to the estuary.

On July 28, 2000, another report by the Buzzards Bay Project titled “A Preliminary Evaluation of Nitrogen Loading and Water Quality of New Bedford Inner Harbor (Acushnet River) as it relates to the Fairhaven Wastewater Treatment Facility”, further refined the nitrogen loadings and again concluded that the Fairhaven wastewater plant is the single largest source of nitrogen.

MassDEP has completed a report (dated December 2008) entitled “Massachusetts Estuaries Project – Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the New Bedford Inner Harbor Embayment System, New Bedford, MA.” The report documents nitrogen-caused impacts on the Acushnet River - New Bedford Inner Harbor embayment system from its headwaters to the hurricane barrier in New Bedford. The report uses historic sources as well as data collected for the study, quantifies sources of nitrogen to the receiving waters, summarizes hydrodynamic and water quality models developed to analyze the impacts of nitrogen loads, establishes a target nitrogen concentration necessary to achieve water quality standards, and using the water quality model evaluates scenarios for achieving the nitrogen target.

In determining the nitrogen threshold for the embayment, the study focused on habitat parameters (particularly infauna¹ since eelgrass has not grown in the receiving waters for at least 50 years), sediment characteristics, and nutrient-related water quality information (particularly dissolved oxygen, chlorophyll *a*² and macroalgae).

Benthic animal populations are influenced by dissolved oxygen and sediment quality. Low organic matter loading and high dissolved oxygen (DO) concentrations generally support healthy habitat and high organic matter loading and low DO do not support healthy habitat. Depletion of oxygen may occur only infrequently yet may have severe effect on system health. High chlorophyll *a* indicates large amounts of algae in the receiving water, which can cause large diurnal swings in dissolved oxygen as the algae produce oxygen during daylight hours and consume it during hours of darkness. Algae blooms also reduce sunlight penetration into the water column, generate high sediment oxygen demands as it dies and decays, and cause odors and visual impairments.

The study found impairment of infaunal habitat quality due to oxygen depletion, the magnitude of daily oxygen excursions, and organic matter enrichment from phytoplankton production (chlorophyll *a* level) at all monitoring locations. These impacts are indicative of nutrient enriched waters, specifically moderate to high nitrogen loading rates.. The study concluded that nitrogen enrichment is related to the dissolved oxygen depletion. Additionally, due to the increased phytoplankton production, the dissolved oxygen levels can rise significantly during daylight hours, due to photosynthesis, to concentrations above atmospheric equilibration. Oxygen levels above atmospheric equilibration is indicative of enriched nitrogen and associated organic matter. All monitoring locations showed periodic oxygen depletions below 5 mg/l and generally less than 4 mg/l.

The upper basin has a moderately impaired benthic habitat due to macroalgal accumulation, high chlorophyll *a* levels, frequent depletions of DO, and a preponderance of stress tolerant species.

The middle basin is a depositional area with sediments consisting of organic rich mud. The middle basin has moderate to high chlorophyll levels, frequent DO depletions and a moderately impaired infaunal community.

The lower basin is slightly to moderately impaired by nitrogen enrichment with significant impairment in localized areas of physical disturbance or altered flushing. The lower basin experiences moderate oxygen depletions and elevated chlorophyll *a* levels.

1 Infauna are benthic animals that live in the substrate of a body of water, especially in a soft sea bottom. Infauna usually construct tubes or burrows and are commonly found in deeper and subtidal waters. Clams, tubeworms, and burrowing crabs are infaunal animals.

2 Chlorophyll is the green pigment found in all plants. Chlorophyll *a* is measured to estimate the abundance of phytoplankton in the water. More chlorophyll *a* indicates that there are more phytoplankton present. Most chlorophyll *a* is found near the surface of the water because there is less light at depth. Chlorophyll *a* concentrations are often highest just below the surface, not at the surface of the water.

In general, the data indicate a gradient in oxygen depletion and chlorophyll a levels from the upper to the lower basins. Consistent with the estuarine response to over-enrichment from nitrogen, the extent of bottom water oxygen depletion parallels the levels of phytoplankton biomass.

Limit Derivation:

The “Massachusetts Estuaries Project – Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for the New Bedford Inner Harbor Embayment System, New Bedford, MA” report developed a loading scenario which would achieve the target total nitrogen concentration of 0.5 mg/l at the most highly impacted “sentinel” location at the head of the middle basin of the Acushnet River (see figure VIII-I) of the report.

The water quality model was first run assuming the elimination of loads from CSOs and the elimination of the Fairhaven WPCF discharge. Under this scenario, the desired nitrogen target of 0.5 mg/l was not achieved. A 13 percent reduction of loads from septic tank discharges was then added, resulting in attainment of the desired target. The estimated loads under this scenario were:

Current total nitrogen load = 310 kg/day (sum of loads from Fairhaven WPCF, New Bedford CSOs, septic, runoff, and fertilizer)

- CSO load eliminated = 25.7 kg/day reduction

- Fairhaven TN load is eliminated = 39236 kg/year = 107.5 kg/day reduction

- 13 percent of septic load eliminated = 11.4 kg/day reduction

Load meeting target TN concentration = 310 kg/day – 107.5 kg/day - 25.7 kg/day - 11.4 kg/day
= 165.4 kg/day

The analysis shows that a TN load of about 165 kg/day is necessary to achieve the target concentration at the sentinel location. The Fairhaven treatment plant currently discharges about 256 lbs/day (116 kg/day) of TN (calculated 2006-2007 average load based on a flow of 1.99 MGD and 15.43 mg/l, which is somewhat greater than the 107.5 kg/day used for the study estimate). The treatment plant discharge of TN therefore has the reasonable potential to cause or contribute to the exceedance of the target concentration given that the current discharge represents about 37 percent of the current loading and 70 percent of the loading that will achieve the target concentration.

Regulations at 40 CFR Part 122.44(d)(1) require that effluent limitations must be included for any pollutant discharge at a level that has the reasonable potential to cause, or contribute to an excursion above any State water quality standard.

Additional scenarios evaluated in the Massachusetts Estuaries Project (MEP) report included the

Fairhaven treatment plant discharging at 3.0 mg/l total nitrogen and various levels of CSO remediation and septic system elimination (see page 173-176). These scenarios provide the necessary detail to determine the extent of CSO remediation and septic system elimination that will need to be accomplished in addition to reducing the Fairhaven treatment plant loading to the limit of technology (3.0 mg/l total nitrogen). Given the magnitude of the overall load reduction necessary to achieve the target load (about 165 kg/day) a high level of removal at Fairhaven, as well as high levels of removal from CSO and septic tank sources are necessary.

A TMDL has not been completed for this receiving water, but the information discussed above shows the reasonable potential for nitrogen discharges from the Fairhaven WPCF to cause or contribute to exceedances of water quality standards and shows that a total nitrogen effluent limit of 3 mg/l at the facility design flow of 5 MGD (coupled with significant reductions in other sources of nitrogen) is necessary to attain water quality standards. Accordingly, EPA and MassDEP have included a monthly average limitation of 57 kg/day (125 lbs/day), which corresponds to treatment plant flow of 5.0 MGD and an effluent concentration of 3 mg/l TN.

The draft permit requires total nitrogen monitoring three times per week. Following completion of the TMDL, EPA will either modify or reissue the permit as necessary to incorporate the nitrogen limits mandated by the TMDL.

C. Other Monitoring Requirements

The effluent monitoring requirements have been specified in accordance with 40 CFR 122.41(j), 122.44(i) and 122.48 to yield data representative of the discharge.

D. Pretreatment Program

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

The permittee will perform an Industrial User Survey as stated in the draft permit.

E. Sludge

In February 1993, the Environmental Protection Agency (EPA) promulgated standards for the use and disposal of sewage sludge. The regulations were promulgated under the authority of section 405(d) of the Clean Water Act (CWA). Section 405(d) of the CWA requires that sludge conditions be included in all municipal permits. The sludge conditions in the draft permit satisfy this requirement.

F. Essential Fish Habitat Determination (EFH)

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. §1801 *et seq.* (1998)), EPA is required to consult with NMFS if EPA's action or proposed actions that it funds, permits, or undertakes, may adversely impact any

essential fish habitat. 16 U.S.C. §1855(b). The Amendments broadly define essential fish habitat as: waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. 16 U.S.C. §1802(10). Adversely impact means any impact which reduces the quality and/or quantity of EFH. 50 C.F.R. §600.910(a). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Essential fish habitat is only designated for fish species for which federal Fisheries Management Plans exist. 16 U.S.C. §1855(b)(1)(A). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999.

Attachment C is the list of 16 managed species that are believed to be present during one or more life-stage within EFH Area, which encompasses the existing discharge site. No “habitat areas of particular concern”, as defined under §600.815(a)(9) of the Magnuson-Stevens Act, have been designated for this site. Although EFH has been designated for this general location, EPA has concluded that this activity is not likely to adversely affect EFH or its associated species for the following reasons:

- This is a re-issuance of an existing permit;
- The quantity of discharge from the WWTF is 5.0 mgd monthly average; Effluent receives as a minimum secondary treatment using activated sludge processes;
- Effluent is discharged into the Acushnet River (New Bedford Inner Harbor) with an estimated dilution ratio of 7.2:1;
- Use of chlorine has been discontinued due to installation of a new Ultra - Violet (U/V) ray system to disinfect fecal coliform;
- A new monthly average total nitrogen limit of 125 lbs/day is established in the draft permit;
- Acute and chronic toxicity tests will be conducted on Inland Silverside and Sea urchin two times per year;
- The permit will prohibit any violation of state water quality standards.

Accordingly, EPA has determined that a formal EFH consultation with NMFS is not required. If adverse impacts to EFH are detected as a result of this permit action, NMFS will be notified and an EFH consultation will be promptly initiated.

G. Endangered Species

Section 7(a) of the Endangered Species Act of 1973, as amended (ESA) grants authority to and imposes requirements upon Federal agencies regarding endangered or threatened species of fish, wildlife, or plants (“listed species”) and habitat of such species that has been designated as critical (a “critical habitat”). The ESA requires every Federal agency, in consultation with and with the assistance of the Secretary of Interior, to insure that any action it authorizes, funds, or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical

habitat. The United States Fish and Wildlife Service (USFWS) typically administers Section 7 consultations for bird, terrestrial, and freshwater aquatic species. The National Marine Fisheries Service (NMFS) typically administers Section 7 consultations for marine species and anadromous fish.

EPA has reviewed the federal endangered or threatened species of fish and wildlife to see if any listed species might potentially be impacted by the re-issuance of this NPDES permit. The review has focused primarily on Bristol County since the discharge is into the Buzzards Bay. Sea Turtles (Green, Kemp's Ridley Leatherback) are listed as endangered species and Sea Turtles (Green and Loggerhead) are listed as threatened species. Based on the conditions in the permit, which are as, or more stringent than in the present permit, EPA has determined that there will be no adverse effects on these species (see section F, EFH for a discussion of the pertinent permit conditions).

EPA is coordinating a review of this finding with NMFS and/or USFWS through the Draft Permit and Fact Sheet and consultation under Section 7 of the ESA with NMFS and/or USFWS is not required. If adverse impacts are detected as a result of this permit action, NMFS and/or USFWS will be notified and a consultation will be promptly initiated.

H. Anti-degradation

This draft permit is being reissued with an allowable wasteload identical to the current permit with the same parameter coverage and no change in outfall location. The State of Massachusetts has indicated that there will be no lowering of water quality and no loss of existing water uses and that no additional anti-degradation review is warranted.

V. State Certification Requirements.

The staff of the Massachusetts Department of Environmental Protection has reviewed the draft permit. EPA has requested permit certification by the State pursuant to 40 CFR 124.53 and expects that the draft permit will be certified.

VI. Public Comment Period, and Procedures for Final Decision

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for the arguments in full by the close of the public comment period, to the U.S. EPA, MA NPDES Municipal Permit Branch 5, Post Office Square, Suite 100 (OEP 6-4), Boston, Massachusetts 02109-3912. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice.

VII. Monitoring and Reporting

The effluent monitoring requirements have been established to yield data representative of the discharge under authority of Section 308 (a) of the CWA in accordance with 40 CFR §§122.41 (j), 122.44 (l), and 122.48.

The Draft Permit includes new provisions related to Discharge Monitoring Report (DMR) submittals to EPA and the State. The Draft Permit requires that, no later than one year after the effective date of the permit, the permittee submit all monitoring data and other reports required by the permit to EPA using NetDMR, unless the permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs and reports (“opt out request”).

In the interim (until one year from the effective date of the permit), the permittee may either submit monitoring data and other reports to EPA in hard copy form, or report electronically using NetDMR.

NetDMR is a national web-based tool for regulated Clean Water Act permittees to submit discharge monitoring reports (DMRs) electronically via a secure Internet application to U.S. EPA through the Environmental Information Exchange Network. NetDMR allows participants to discontinue mailing in hard copy forms under 40 CFR 122.41 and 403.12. NetDMR is accessed from the following url: <http://www.epa.gov/netdmr> Further information about NetDMR, including contacts for EPA Region 1, is provided on this website.

The Draft Permit requires the permittee to report monitoring results obtained during each calendar month using NetDMR no later than the 15th day of the month following the completed reporting period. All reports required under the permit shall be submitted to EPA as an electronic attachment to the DMR. Once a permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to EPA and will no longer be required to submit hard copies of DMRs to MassDEP. However, permittees must continue to send hard copies of reports other than DMRs to MassDEP until further notice from MassDEP.

The Draft Permit also includes an “opt out” requests process. Permittees who believe they can not use NetDMR due to technical or administrative infeasibilities, or other logical reasons, must demonstrate the reasonable basis that precludes the use of NetDMR. These permittees must submit the justification, in writing, to EPA at least sixty (60) days prior to the date the facility would otherwise be required to begin using NetDMR. Opt outs become effective upon the date of written approval by EPA and are valid for twelve (12) months from the date of EPA approval. The opt outs

expire at the end of this twelve (12) month period. Upon expiration, the permittee must submit DMRs and reports to EPA using NetDMR, unless the permittee submits a renewed opt out request 60 days prior to expiration of its opt out, and such a request is approved by EPA.

Until electronic reporting using NetDMR begins, or for those permittees that receive written approval from EPA to continue to submit hard copies of DMRs, the Draft Permit requires that submittal of DMRs and other reports required by the permit continue in hard copy format.

VIII. EPA Contact

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

Suproakash Sarker, P.E.
Municipal Permits Branch
Environmental Protection Agency
5 Post Office Square, Suite 100 (OEP 6-4)
Boston, MA 02109-3912
Telephone: (617) 918-1693
E-Mail: sarker.soupy@epa.gov

Date

Stephen Perkins, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency