

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
ONE CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023**

FACT SHEET

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

NPDES PERMIT NO: MA0100676

NAME AND ADDRESS OF APPLICANT:

**Town of Somerset
116 Walker Street
Somerset, MA 02725**

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

**Town of Somerset
Water Pollution Control Facility
116 Walker Street
Somerset, MA 02725**

RECEIVING WATERS: Taunton River (MA 62-04)

CLASSIFICATION: Class SB (R) CSO

I. PROPOSED ACTION

The above named applicant has applied to the U.S. Environmental Protection Agency for the re-issuance of its National Pollutant Discharge Elimination System (NPDES) permit to discharge into the designated receiving water. The current permit was signed on April 16, 1999 and became effective thirty (30) days later. The permit expired October 17, 2003. A re-application was completed on September 8, 2003. This draft permit, after it becomes effective, will expire five (5) years from the effective date of issuance.

II. TYPE OF FACILITY AND DISCHARGE LOCATION

The facility is a 4.2 million gallon per day (mgd) secondary wastewater treatment plant with a chlorination/dechlorination system for disinfection. The collection system is a separate sanitary system and serves a population of 17,012. Treated wastewater is discharged to the Taunton River through a 540-foot outfall pipe (Figure 1). Sludge from the facility is composted on site and sold through a public bidding process.

The facility's discharge outfall is listed below:

<u>Outfall</u>	<u>Description of Discharge</u>	<u>Outfall Location</u>
001	Treated Effluent	Taunton River

III. DESCRIPTION OF DISCHARGE

Quantitative descriptions of the discharge in terms of significant effluent parameters, based on recent discharge monitoring reports (DMRs) for the months of April 2001 through March 2003, and on the 2003 application, are shown on Tables 1 and 2 of this fact sheet.

IV. LIMITATIONS AND CONDITIONS

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

V. PERMIT BASIS AND EXPLANATION OF EFFLUENT LIMITATION DERIVATION

A. PROCESS DESCRIPTION

The present Somerset Water Pollution Control Facility was completed in 1997. In 1978, the design process for expanding and upgrading the plant began. The majority of the facility was brought on line in 1991. The facility is designed to provide secondary treatment for an average annual daily flow of 4.2 MGD and a peak hourly flow of 10.07 MGD. At present, the annual average daily flow rate is 2.7 MGD as reported in the recent application. The treatment system includes the following units (Figure 2):

1. Headworks w/ flow equalization option
2. Primary Clarifiers
3. Aeration Tanks
4. Secondary Clarifiers
5. Chlorine Disinfection
6. Dechlorination
7. Outfall

Influent enters the facility and is pumped, using two (2) Archimedes screws pumps, to bring the influent up 22 feet to provide gravity flow through the rest of the treatment facility. Except during high flows, the pumps are alternated to reduce wear. At the headworks, influent passes through two (2) mechanically-cleaned bar screens and two (2) grit removal tanks. Influent is measured at a set of parshall flumes. A very limited amount of septage/leachate is processed by the facility. At this point, the facility has the option during high flow to divert flows to the flow equalization tanks, which are the original two (2) primary clarifiers and three (3) aeration tanks from the 1972 facility plus a single additional aeration tank built as part of the upgrade. Wastewater flows to the two (2) primary clarifiers for settling followed by four (4) aeration tanks and then two (2) secondary clarifiers. Treated wastewater from the secondary clarifiers then flows to the chlorine contact chambers. The facility continues to use chlorine gas. The effluent is then dechlorinated with sodium bisulfate. Effluent then flows through a 540 feet of pipe to the Taunton River.

Waste activated sludge (WAS) is sent to the gravity belt thickener and then flows by gravity to the storage well. Thickened WAS and primary sludges are sent to the belt filter press where it is blended, polymer conditioned and dewatered. Sludge cake is then blended with wood chips to control moisture content. The blend is then composted for 25 days. The compost is then allowed to cure additional time. Final disposal is sold commercially as Class I compost.

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Overview of Federal and State Regulations

Under Section 301(b)(1) of the Clean Water Act ("CWA"), publicly owned treatment works ("POTWs") must achieve effluent limitations based upon Secondary Treatment by July 1, 1977. The secondary treatment requirements are set forth at 40 C.F.R. Part 133.102. In addition, Section 301(b)(1)(c) of the CWA requires that effluent limitations based on water quality considerations be established for point source discharges when such limitations are necessary to meet state or federal water quality standards that are applicable to the designated receiving water.

Pursuant to 40 C.F.R. § 122.44 (d), permittees must achieve water quality standards established under Section 303 of the Clean Water Act (CWA), including state narrative criteria for water quality. Additionally, under 40 C.F.R. § 122.44 (d)(1)(i), "Limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." When determining whether a discharge causes, or has the reasonable potential to cause or contribute to an in-stream excursion above a narrative or numeric criterion, the permitting authority shall use procedures which account for existing controls on point and non-point sources of pollution, and where appropriate, consider the dilution of the effluent in the receiving water.

2. Water Quality Standards; Designated Use; Outfall 001

The Taunton River, downstream of the Route 24 Bridge to the mouth of the river is classified as Class SB waters in the Massachusetts Surface Water Quality Standards (314 CMR 4.00). Class SB waters are designated as a habitat for fish, other aquatic life, and wildlife, and for primary and secondary contact recreation. In approved areas, they shall be suitable for shellfish harvesting with depuration (Restricted Shellfish Areas). The waters shall have consistently good aesthetic value. This area is classified as restricted shellfishing but at time the shellfish beds have been closed by the resource managers.

This segment of the Taunton River is on the 2002 Massachusetts List of Integrated Waters (303(d))for organic enrichment, low dissolved oxygen and pathogens.

Available Dilution

Water quality based limitations are established with the use of a calculated available dilution. The 7Q10 flow for this facility is 142.1 cfs. This value is from previous DEP studies and was used in the last permit.

$$\frac{\text{River flow (7Q10)} + \text{Daily average design effluent flow}}{\text{River Flow (7Q10)}} = \text{Dilution}$$

$$\frac{142.1 + 6.5}{6.5} = 22.9$$

Flow - The flow limit is based on the annual average design flow of the treatment plant, which is 4.2 mgd. For reporting purposes, the flow limit is now expressed as an annual average, rather than a monthly average as in the current permit. This change is being made to all POTW permits in MA at

the request of MADEP. The purpose of this change was to allow some variation in POTW flows in response to wet weather, and in recognition that the flow rate used as the monthly average is in most cases presented in the treatment plant planning documents as an annual average. As part of this change in how flow limits are written, DEP and EPA agreed that mass limitations for BOD and TSS should be included as permit conditions to ensure that existing controls on mass discharges of BOD and TSS were maintained, in order to prevent degradation of the receiving water.

To provide some background, every treatment plant has any number of design flows. The design engineer could provide a design flow for any time period, including yearly, monthly, daily, and hourly. A design flow is simply the flow rate which the designer establishes can be adequately treated over a given time period. Typically, a treatment facility can provide adequate treatment for higher flow rates for short periods than it can for long periods, meaning that design flow increases as the time period decreases. The annual average design flow is almost always provided in the planning documents for POTWs. Other design flow rates are not as consistently calculated or provided in planning documents. The Somerset facility dedication document, dated September 17, 1997, lists the annual average flow of 4.2 mgd and a peak flow of 10.07 mgd.

Therefore, the previous use of an annual average flow as a monthly average limit provided some conservatism to the permit by not allowing the facility to operate at its maximum monthly hydraulic capacity. We believe that this was the intention of EPA and MADEP in limiting the flow in this manner. We have now decided to relax the flow limit somewhat, but have sought to balance this action by imposing mass limitations on the discharge of BOD and TSS to ensure that the easing of the flow restriction does not result in a significant increase of pollutants during months when the monthly average discharge flow exceeds the limit established in the current permit. We have also strengthened the I/I requirements of the permit to ensure that the permittee maintains efforts to minimize extraneous flows to the collection system.

OUTFALL 001 - CONVENTIONAL POLLUTANTS

Biochemical Oxygen Demand (BOD₅) - The draft permit carries forward the average monthly and average weekly limits in the previous permit. The limits are based on the requirements set forth at 40 CFR 133.102 (b)(1), (2) and 40 CFR 122.45 (f). The secondary treatment limitations are monthly average BOD₅ concentrations of 30 mg/l, weekly average concentrations of 45 mg/l. The permittee shall report the maximum BOD value monthly, however, a maximum daily limit will not be set. The mass limitations for BOD are based on a 4.2 MGD design flow. The monitoring frequency continues to be once per week.

Total Suspended Solids (TSS) - The draft permit carries forward the average monthly and average weekly limits in the previous permit. The limits are based on the requirements set forth at 40 CFR 133.102 (b)(1), (2) and 40 CFR 122.45 (f). The secondary treatment limitations are monthly average TSS concentrations of 30 mg/l, weekly average concentrations of 45 mg/l. The permittee shall report the maximum TSS value monthly, however, a maximum daily limit will not be set. The mass limitations for TSS are based on a 4.2 MGD design flow. The monitoring frequency continues to be once per week.

BOD₅ and TSS Mass Loading Calculations:

Calculations of maximum allowable loads for maximum daily, average weekly, and average monthly BOD₅ and TSS are based on the following equation:

$$L = C \times DF \times 8.34 \text{ or } L = C \times DF \times 3.79 \text{ where:}$$

L = Maximum allowable load in lbs/day.

C = Maximum allowable effluent concentration for reporting period in mg/l.

Reporting periods are average monthly and weekly and daily maximum.

DF = Design flow of facility in MGD.

8.34 = Factor to convert effluent concentration in mg/l and design flow in MGD to lbs/day.

3.79 = Factor to convert effluent concentration in mg/l and design flow in MGD to kg/day.

(Concentration limit) [45] X 8.34 (Constant) X 4.2 (design flow) = 1576 lb/day

(Concentration limit) [45] X 3.79 (Constant) X 4.2 (design flow) = 716 kg/day

(Concentration limit) [30] X 8.34 (Constant) X 4.2 (design flow) = 1051 lb/day

(Concentration limit) [30] X 3.79 (Constant) X 4.2 (design flow) = 478 kg/day

Eighty-Five Percent (85%) BOD₅ and TSS Removal Requirement - the provisions of 40 CFR §133.102(3) requires that the 30 day average percent removal for BOD and TSS be not less than 85%. These limits are maintained in the draft permit.

pH - The draft permit includes pH limitations which are required by state water quality standards, and are at least as stringent as pH limitations set forth at 40 C.F.R. §133.102(c). Class SB waters shall be in a range of 6.5 through 8.5 standard units and not more than 0.2 standard units outside of the normally occurring range (314 CMR 4.0 (4)(a)3). There shall be no change from background conditions that would impair any use assigned to this class. The monitoring frequency is once (1) per day.

Fecal Coliform Bacteria - The draft permit includes fecal coliform bacteria limitations which are in accordance with the Massachusetts Surface Water Quality Standards 314 CMR 4.05 (4)(b). The Taunton River from the Fall River/Freetown/Somerset boundary to the mouth at the Braga Bridge in Fall River/Somerset is classified as Class SB (R) in the Massachusetts Surface Water Quality Standards. However, shellfish beds in the vicinity of the discharge have been closed by resource managers with the Massachusetts Division of Marine Fisheries.

Therefore, in Class SB waters not approved for shellfishing, fecal coliform bacteria shall not exceed a geometric mean of 200 organisms in any representative set of sample, nor shall more than 10% of the samples exceed 400 organisms per 100 ml. The limits on fecal coliform are carried forward from the previous permit. The limits in the draft permit are 200/100 ml average monthly and 400/100 ml maximum daily. The monitoring frequency for fecal coliform continues as once (1) per week.

Settleable Solids - The draft permit includes a monthly average and weekly average limit of 0.1 ml/l and a maximum daily limit of 0.3 ml/l sampling requirement for settleable solids. Samples should be taken once (1) per day with an additional grab sample taken during periods of peak flow. The facility has contact chambers which have a tendency to accumulate solids that may be resuspended during periods of peak flow

OUTFALL 001 - NON-CONVENTIONAL POLLUTANTS

Total Residual Chlorine - Chlorine is a toxic chemical. DMRs show total chlorine residual levels between 0.1 and 0.3 maximum daily for the past 24 months. The draft permit includes total residual chlorine limitations which are based on state water quality standards [Title 314 CMR 4.05(5)(e)].

Chlorine compounds produced by the chlorination of wastewater can be extremely toxic to aquatic life.

The water quality standards for chlorine defined in the 2002 EPA National Recommended Water Quality Criteria for saltwater are 13 ug/l daily maximum and 7.5 ug/l monthly average in the receiving water. Given the dilution factor of 22.9, total residual chlorine limits have been calculated as 0.3 mg/l maximum daily and 0.2 mg/l average monthly. Sampling is continued at three (3) per day. Once per week when the Fecal Coliform Bacteria sample are collected, a TRC sample must be collected concurrently.

Total Residual Chlorine Limitations:

(acute criteria * dilution factor) = Acute (Maximum Daily)
 $(13 \text{ ug/l} \times 22.9) = 297.7 \text{ ug/l} = 0.297 \text{ mg/l}$

(chronic criteria * dilution factor) = Chronic (Monthly Average)
 $(7.5 \text{ ug/l} \times 22.9) = 171.75 \text{ ug/l} = 0.171 \text{ mg/l}$

Nitrogen - As previously noted, the mouth of the Taunton River is on the Massachusetts 303(d) list for organic enrichment/low dissolved oxygen. In marine systems, discharges of nitrogen are typically the cause of such conditions. The monitoring data collected by the permittee, along with data from other discharges to the Taunton River are necessary for the future completion of a TMDL.

Nitrogen is an essential nutrient for the growth of algae. The increased accumulation of algae can result in many adverse changes to coastal ecosystems like limiting the transmission of light reaching eelgrass leaves, resulting in the loss of eelgrass beds that provide habitat for shellfish and other animals. At the same time, ammonia is a toxic pollutant which may be harmful to aquatic organisms. Thus, the monitoring requirements of total kjeldahl nitrogen, nitrate and ammonia are included in the draft permit. However, no limits have been given at this time. A Total Maximum Daily Load (TMDL) Study is planned for Mount Hope Bay, however, the commencement of that study is not expected for 3 to 5 years. Dischargers should anticipate nutrient limits in the future pending the completion of the TMDL. Any plans for upgrades should be evaluated with future limits in mind.

Copper - Certain metals like copper can be toxic to aquatic life. The maximum daily discharge of copper reported by this facility in the 2003 application was 0.23 mg/l. This value is less than the acute limit, therefore, it is determined there is no reasonable potential. The copper reporting requirement has been removed from this permit. Copper monitoring should continue to be done as part of the quarterly Whole Effluent Toxicity testing.

Chronic (chronic criteria * dilution factor)/conversion factor = Chronic (Monthly Average)
 $(3.1 \text{ ug/l} * 22.9) / 0.83 = 85.5 \text{ ug/l} = 0.855 \text{ mg/l}$

Acute (acute criteria * dilution factor)/conversion factor = Acute (Maximum Daily)
 $(4.8 \text{ ug/l} * 22.9) / 0.83 = 132.4 \text{ ug/l} = 1.32 \text{ mg/l}$

OUTFALL 001 - WHOLE EFFLUENT TOXICITY (WET)

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 the following narrative statement and requires that EPA criteria established pursuant to Section 304(a)(1) of the

CWA be used as guidance for interpretation of the following narrative criteria: All surface waters shall be free from pollutants in concentrations or combinations that are toxic to humans, aquatic life or wildlife.

National studies conducted by the EPA have demonstrated that domestic sources contribute toxic constituents to POTWs. These constituents include metals, chlorinated solvents, aromatic hydrocarbons and others. Based on the potential for toxicity from domestic sources, the state narrative water quality criterion, the level of dilution at the discharge location, and in accordance with EPA national and regional policy and 40 C.F.R. § 122.44 (d), the draft permit includes an acute toxicity limitation of (LC50 \geq 100%). (See also, "Policy for the Development of Water-Quality based Permit Limitations for Toxic Pollutants", 49 Fed. Reg. 9016 March 9, 1984, and EPA's "Technical Support Document for Water Quality-Based Toxics Control", September, 1991.)

The draft permit carries forward a requirement for quarterly acute toxicity testing. The tests must be performed annually in February, May, August and November in accordance with the test protocols specified in **Permit Attachment A.** The months of sampling have been changed from the previous permit to provide consistency with the other dischargers in the Taunton River Watershed.

As a condition of this permit, the testing requirements may be reduced if certain conditions are met. The permit provision anticipates that the permittee may wish to request a reduction in the 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 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.

VI. INFLOW/INFILTRATION REQUIREMENTS

The draft permit includes requirements for the permittee to control infiltration and inflow (I/I). Infiltration/inflow is extraneous water entering the wastewater collection system through a variety of sources. The permittee shall develop an I/I removal program commensurate with the severity of the I/I in the collection system. Where portions of the collection system have little I/I, the control program will logically be scaled down.

Infiltration is groundwater that enters the collection system through physical defects such as cracked pipes, or deteriorated joints. Inflow is extraneous flow entering the collection system through point sources such as roof leaders, yard and area drains, sump pumps, manhole covers, tide gates, and cross connections from storm water systems.

Significant I/I in a collection system may displace sanitary flow reducing the capacity and the efficiency of the treatment works and may cause bypasses to secondary treatment. It greatly increases the potential for sanitary sewer overflows (SSO) in separate systems, and combined sewer overflows in combined systems.

The permit standard conditions for 'Proper Operation and Maintenance' are found at 40 CFR §122.41(e). These require proper operation and maintenance of permitted wastewater systems and related facilities to achieve permit conditions. Similarly, the permittee has a 'duty to mitigate' as stated in 40 CFR §122.41 (d). This requires the permittee to take all reasonable steps to minimize or prevent any discharge in violation of the permit which has a reasonable likelihood of adversely

effecting human health or the environment. EPA and MADEP maintain that an I/I removal program is an integral component to insuring permit compliance under both of these provisions.

The MADEP has stated that inclusion of the I/I conditions in the draft permit shall be a standard State Certification requirement under Section 401 of the Clean Water Act and 40 CFR §124.55(b).

VII. SLUDGE INFORMATION AND REQUIREMENTS

Section 405(d) of the Clean Water Act requires that sludge conditions be included in all POTW permits. The Somerset WPCF waste activated sludge (WAS) is sent to the gravity belt thickener and then flows by gravity to the storage well. Thickened WAS and primary sludges are sent to the Belt Filter Press where it is blended, polymer conditioned and dewatered. Sludge cake is then blended with wood chips to control moisture content. The blend is then composted for 25 days. The compost is then fed through a rotary screen to separate the bulking agent from the stabilized compost. The compost is then allowed to cure additional time. Cured compost is sold commercially as Class I compost as either mulch or a soil conditioner. If the ultimate sludge disposal method changes, the permit requirements pertaining to sludge monitoring and other conditions would change accordingly.

VIII. ANTI-BACKSLIDING

Anti-backsliding as defined at 40 CFR §122.44(l)(1) requires reissued permits to contain limitations as stringent or more stringent than those of the previous permit unless the circumstances allow application of one of the defined exceptions to this regulation. Anti-backsliding does not apply when changes to limits are based on new information not available at the time of the previous permit reissuance (40 CFR §122.44 (l)(2)(i)(B)(1)) or when limits are changed as a result of material and substantial additions or alterations to the permitted facility which occurred after permit issuance which justify the application of less stringent limitations, as defined 40 CFR § 122.44 (l)(2)(i)(A).

IX. ANTI-DEGRADATION

The Massachusetts Anti-degradation Policy is found at Title 314 CMR 4.04. All existing uses of the Taunton River must be protected. This draft permit is being reissued with allowable discharge limits as or more stringent than the current permit with the same parameter coverage with the exception of the copper reporting requirement. Monthly copper reporting has been eliminated however, the permittee will continue to monitor copper quarterly as part of the Whole Effluent Toxicity testing.

There is no change in outfall location. The public is invited to participate in the anti-degradation finding through the permit public notice procedure.

X. UNAUTHORIZED DISCHARGES

The permittee is not authorized to discharge wastewater from any pump station emergency overflow. Overflows must be reported in accordance with reporting requirements found in Section D.1.e. of Part II of the permit (24-hour reporting). If a discharge does occur, the permittee must notify the EPA, the MA DEP, and others, as appropriate (i.e. local Public Health Department), both orally and in writing as specified in the draft permit.

XI. ESSENTIAL FISH HABITAT

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 the National Marine Fisheries Service (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” (EFH) as: “waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity,” 16 U.S.C. § 1802(10). “Adverse 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. Id.

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.

EFH Species

The following is a list of the EFH species and applicable life stage(s) for the area that includes the Taunton River near Somerset, MA.

Summary of Essential Fish Habitat (EFH) Designation

10'' x 10'' Square Coordinates:

Boundary	North	East	South	West
Coordinate	41° 50.0'' N	71° 10.0'' W	41° 40.0'' N	71° 20.0'' W

Square Description (i.e. habitat, landmarks, coastline markers): The waters within the square within the Narragansett Bay estuary affecting the following: Mt. Hope Bay, west of Fall River, MA., south of Barrington Beach and Barrington, RI., as well as the following: Belcher Cove, the Runnins River, Warren River, Palmer River, Barrington River, Bristol Harbor, Kickamuit River, Cedar Cove, Cole River, Chase Cove, the Bristol Narrows, Lee River, and the Hundred Acre Cove. These waters also affect the following: Mt. Hope, RI., Touisset, RI., Touisset Highlands, RI., Toweset Pt., Coggeshall, RI., Spar I., Rumstick Rock, Rumstick Shoal, Neck, and Pt., Tyler Pt., Warren, RI., and New Meadow Neck on The Palmer and Barrington Rivers, Adams Pt. on the Palmer River, Sewammock Neck, Borden, Flats, Old Bay Rock and Gardiners Neck south of Swansea, MA., and Ocean Grove, MA. Finally, these waters affecting eastern Bristol Neck, and Bristol, RI., except for the tip of Mt. Hope Pt., and except for Bristol Neck from Church Cove, south around Bristol Pt., back up to Bristol Harbor, as well as Popaquash Neck except for the part from Bristol Harbor, south past Usher Cove and around Popaquash Pt., up to half way up the west coast of Popaquash Neck. The northeast corner of this square is within the mixing water salinity zone for Narragansett Bay, at the entrance to the Taunton River.

Species	Eggs	Larvae	Juveniles	Adults
haddock (<i>Melanogrammus aeglefinus</i>)		X		
red hake (<i>Urophycis chuss</i>)		X	X	X
winter flounder (<i>Pleuronectes americanus</i>)	X	X	X	X
yellowtail flounder (<i>Pleuronectes ferruginea</i>)				
windowpane flounder (<i>Scophthalmus aquosus</i>)	X	X	X	X
American plaice (<i>Hippoglossoides platessoides</i>)		X	X	X
Atlantic sea herring (<i>Clupea harengus</i>)		X	X	X

bluefish (<i>Pomatomus saltatrix</i>)			X	X
Atlantic mackerel (<i>Scomber scombrus</i>)	X	X	X	X
summer flounder (<i>Paralichthys dentatus</i>)		X	X	X
scup (<i>Stenotomus chrysops</i>)	X	X	X	X
black sea bass (<i>Centropristus striata</i>)	n/a		X	X
king mackerel (<i>Scomberomorus cavalla</i>)	X	X	X	X
Spanish mackerel (<i>Scomberomorus maculatus</i>)	X	X	X	X
cobia (<i>Rachycentron canadum</i>)	X	X	X	X

The Taunton River/Mount Hope Bay in the vicinity of the Somerset Water Pollution Control Facility discharge is designated essential fish habitat (EFH) for 15 species of finfish. Based on the amount and frequency of the discharge, as well as effluent limitations and other permit requirements identified in this Fact Sheet that are designed to be protective of all aquatic species, including those with designated EFH, EPA has determined that a formal EFH consultation with NMFS is not required because the proposed discharge will not adversely impact EFH.

XII. COASTAL ZONE MANAGEMENT (CZM) CONSISTENCY REVIEW

40CFR §122.49 (d) states: *The Coastal Zone Management Act, 16 U.S.C. 1451 et seq. section 307(c) of the Act and implementing regulations (15 CFR part 930) prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management program, and the State or its designated agency concurs with the certification (or the Secretary of Commerce overrides the State's nonconcurrence).*

The discharge is within the defined CZM boundaries. The permittee has submitted a letter dated December 12, 2003 to the Massachusetts Coastal Zone Management Program stating their intention to abide by the CZM water quality and habitat policies. The CZM shall review the draft permit and it will only be issued after CZM certification.

XIII. MONITORING AND REPORTING

The permittee is obliged to monitor and report sampling results to EPA and the MADEP within the time specified in the permit. The effluent monitoring requirements have been established to yield data representative of the discharge by the authority under Section 308(a) of the CWA in accordance with 40 CFR 122.441(j), 122.44, and 122.48.

The remaining general conditions of the permit are based primarily on the NPDES regulations 40 CFR 122 through 125 and consist primarily of management requirements common to all permits.

XIV. STATE PERMIT CONDITIONS

The NPDES Permit is issued jointly by the U. S. Environmental Protection Agency and the Massachusetts Department of Environmental Protection under federal and state law, respectively. As such, all the terms and conditions of the permit are, therefore, incorporated into and constitute a discharge permit issued by the MA DEP Commissioner.

XV. GENERAL CONDITIONS

The general conditions of the permit are based on 40CFR Parts 122, Subparts A and D and 40 CFR 124, Subparts A, D, E, and F and are consistent with management requirements common to other permits.

XVI. STATE CERTIFICATION REQUIREMENTS

The staff of the Massachusetts Department of Environmental Protection ("MADEP") 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.

XVII. 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 their arguments in full by the close of the public comment period, to the U.S. EPA, Office of Ecosystem Protection, MA Unit, One Congress Street, Suite-1100, Boston, Massachusetts 02114. 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. Public hearings may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates a 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 a 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.

XVIII. 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:

Michele Cobban Barden
Office of Ecosystem Protection
U.S. Environmental Protection Agency
One Congress Street, Suite-1100 (CPE)
Boston, MA 02114-2023
Telephone: (617) 918-1539
Barden.Michele@epa.gov

June 4, 2004
Date

Linda M. Murphy, Director
Office of Ecosystem Protection
U.S. Environmental Protection Agency

**Dartmouth Water Pollution Control Facility
2003 Application Data**

Parameter	Units	Maximum Daily Value	Average Daily Value	Number of Samples
pH (minimum)	SU	6.5	***	***
pH (maximum)	SU	7.2	***	***
Flow Rate	Million Gallons/Day	5.091	2.708	365
Temperature (Winter)	Fahrenheit	54.7	51.6	90
Temperature (Summer)	Fahrenheit	72.3	70.3	90
Biochemical Oxygen Demand	mg/l	61.1	14.8	91
Fecal Coliform Bacteria	colonies/100 ml	233	18	53
Total Suspended Solids	mg/l	51	11.9	55
Dissolved Oxygen	mg/l	13	9.6	3
Ammonia	mg/l	27.0	2.56	24
Total Residual Chlorine	mg/l	0.3	0.1	24
Total Kjeldahl Nitrogen	mg/l	29.0	8.9	24
Nitrate plus nitrite	mg/l	7.3	3.3	24
Phosphorus	mg/l	1.1	0.8	3
Copper	mg/l	0.04	0.02	24
Zinc	mg/l	0.03	0.03	3