

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND
1 CONGRESS STREET
SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

FACT SHEET

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

NPDES NO: MA0101630

NAME AND ADDRESS OF PERMITTEE:

City of Holyoke Department of Public Works
63 Canal Street
Holyoke, MA 01040

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Water Pollution Control Facility
One Berkshire Street
Holyoke, Massachusetts 01040

and

Combined Sewer Overflow (CSO) discharges at 13 locations

RECEIVING WATER: Connecticut River (Segment MA 34-05)

CLASSIFICATION: B (Warm Water Fishery)

LATITUDE: 42° 11' 25" N

LONGITUDE: 72° 36' 43" W

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

The above named applicant has requested that the U.S. Environmental Protection Agency reissue its NPDES permit to discharge into the designated receiving waters. The Holyoke Water Pollution Control Facility (WPCF) is a 17.5 mgd (27.0 cfs) secondary treatment facility which employs the pure oxygen activated sludge process. The population served is 38,000 and there are 6 Categorical Industrial Users (CIUs). The location of the facility is shown in Figure 1.

Wastewater is collected via a sewerage system that is approximately 66% combined sewers. During periods of high flow, combined wastewater is diverted from the collection system and discharged through a CSO outfall. While multiple diversion structures may discharge through the same CSO, it is only the CSO outfall that is permitted. There are 14 CSO outfall locations authorized to discharge combined wastewater under the current permit.

An administrative order issued in February, 2005, required the City to complete improvements to the WWTF, necessary in-line storage, and the Berkshire St. CSO facility by 2008. These improvements will provide screening, preliminary treatment, and disinfection of flows expected to recur every 3 months at the Berkshire St. CSO facility. In addition, the order required the separation of the sewer system and the elimination of the CSO (No. 14) in the Mosher St. area by December 1, 2005. The Mosher St. CSO has been eliminated. Consequently, there are 13 CSO locations that are authorized to discharge in the draft permit. A list of the CSO locations is shown in Attachment 1.

The facility produces approximately 3,213 dry metric tons of sludge which is transported and composted by a private contractor.

II. Description of Discharge

A quantitative description of the discharge in terms of significant effluent parameters based on monitoring data since the expansion of the facility is shown in Attachment 2.

III. Permit limitations and Conditions

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

IV. Permit Basis and Explanation of Effluent Limitation Derivation

A. General Statutory and Regulatory Background

EPA is issuing this permit pursuant to Section 402(a) of the Clean Water Act. The Commonwealth of Massachusetts is also issuing this permit pursuant to Massachusetts General Laws ch. 21, § 43 (2004).

The Clean Water (CWA) prohibits the discharge of pollutants to waters of the United States without a National Pollutant Discharge Elimination System (NPDES) permit unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology and water quality-based effluent limitations and other requirements including monitoring and reporting. The draft NPDES permit was developed in accordance with various statutory and regulatory requirements established pursuant to the CWA and any applicable State administrative rules. The regulations governing EPA's NPDES permit program are generally found in 40 CFR Parts 122, 124, 125 and 136.

EPA is required to consider technology and water quality-based requirements as well as those

requirements and limitations included in the existing permit when developing the renewed permit's effluent limits. Technology-based treatment requirements represent the minimum level of control that must be imposed under Sections 301(b) and 402 of the CWA. Secondary treatment technology guidelines (i.e. effluent limitations) for POTWs can be found at 40 CFR Part 133.

All statutory deadlines for meeting various treatment technology-based effluent limitations established pursuant to the CWA have expired. When technology-based effluent limits are included in a permit, compliance with those limitations is from the date the issued permit becomes effective. See 40 CFR §125.3(a)(1). Compliance schedules and deadlines not in accordance with the statutory provisions of the CWA cannot be authorized by an NPDES permit. Compliance schedules to meet water quality based effluent limits may be included in permits only when the state's water quality standards clearly authorize such schedules and where the limits are established to meet a water quality standard that is either newly adopted, revised, or interpreted after July 1, 1977.

Section 301(b)(1)(C) of the CWA requires NPDES permits to contain effluent limits more stringent than technology-based limits where more stringent limits are necessary to comply with, among other things, any applicable state or federal water quality standards. A water quality standard consists of three elements: (1) beneficial designated use or uses for a water body or a segment of a water body; (2) numeric and narrative water quality criteria sufficient to protect the assigned designated use(s); and (3) antidegradation requirements to ensure that existing uses and high quality waters are protected and maintained.

The Massachusetts Surface Water Quality Standards (314 CMR 4.00, February, 1996) establish designated uses of the State's waters, criteria to protect those uses, and an antidegradation provision to ensure that existing uses and high quality waters are protected and maintained. They also include requirements for the regulation and control of toxic constituents and specify that EPA's recommended water quality criteria, established pursuant to Section 304(a) of the CWA, shall be used unless a site specific criterion is established.

Section 401(a)(1) of the CWA forbids the issuance of a federal license for a discharge to waters of the United States unless the state where the discharge originates either certifies that the discharge will comply with, among other things, state water quality standards, or waives certification. EPA's regulations at 40 CFR § 122.44(d)(3), §124.53 and §124.55 describe the manner in which NPDES permits must conform to conditions contained in state certifications.

Section 402(o) of the CWA provides, generally, that the effluent limitations of a renewed, reissued, or modified permit must be at least as stringent as the comparable effluent limitations in the previous permit. Unless certain limited circumstances are met, "backsliding" from effluent limitations contained in previously issued permits that were based on CWA §§ 301(b)(1)(C) or 303 is prohibited. EPA has also promulgated anti-backsliding regulations, which are found at 40 CFR § 122.44(l). Unless statutory and regulatory backsliding requirements are met, the limits in the reissued permit must be at least as stringent as those in the previous permit.

B. Development of Water Quality-based Limits

Receiving stream requirements are established according to numerical and narrative standards adopted under state law for each stream classification. When using chemical-specific numeric criteria from the state's water quality standards to develop permit limits both the acute and chronic aquatic life criteria are used and expressed in terms of maximum allowable instream pollutant concentration. Maximum daily limits are generally derived from the acute aquatic life criteria, and the average monthly limit is generally derived from the chronic aquatic life criteria. Chemical specific limits are established in accordance with 40 CFR §122.44(d) and §122.45(d).

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 causes or has "reasonable potential" to cause or contribute to an excursion above any water quality criterion. An excursion occurs if the projected or actual instream concentration exceeds the applicable criterion.

In determining reasonable potential, EPA considers: (1) existing controls on point and non-point sources of pollution; (2) pollutant concentration and variability in the effluent and receiving water as determined from permit application, monthly discharge monitoring reports (DMRs), and State and Federal water quality reports; (3) sensitivity of the species to toxicity testing; (4) statistical approach outlined in *Technical Support Document for Water Quality-based Toxics Controls*, March 1991, EPA/505/2-90-001 in Section 3; and, where appropriate, (5) dilution of the effluent in the receiving water. In accordance with Massachusetts Water Quality Standards [314 CMR 4.03(3)], available dilution for rivers and streams is based on a known or estimated value of the lowest average flow which occurs for seven (7) consecutive days with a recurrence interval of once in ten (10) years, the 7Q10 flow.

Waterbody Classification and Usage

The Connecticut River is classified as a Class B waterbody by the Massachusetts Department of Environmental Protection (MassDEP). The Massachusetts Surface Water Quality Standards (314 CMR 4.05(3)(b)) state that Class B waters shall have the following designated uses:

"These waters are designated as habitat for fish, other aquatic life and wildlife, and for primary and secondary contact recreation. Where designated they shall be suitable as a source of public water supply with appropriate treatment. They shall be suitable for irrigation and other agricultural uses and for compatible industrial cooling and process uses. These waters shall have consistently good aesthetic value."

The *Connecticut River Basin 1998 Water Quality Assessment Report* indicates that the river segment to which the Holyoke WPCF discharges is assessed as nonsupport for fish consumption and primary contact due to PCB contamination and pathogens from CSOs, urban runoff and storm sewers, and other unknown sources. It is also assessed as partial support for secondary contact for pathogens from similar sources. This segment is not assessed for aquatic life and aesthetics. The *Proposed Massachusetts Year 2006 Integrated List of Waters* [Clean Water Act, Section '303(d) list'] shows that this segment is not attaining water quality standards due to priority organics, pathogens, and suspended solids.

Flow and Dilution Factor

The *Connecticut River Basin 1998 Water Quality Assessment Report* indicates a 7-day mean stream low flow with a 10-year recurrence interval (7Q10) of 1,775 cfs is available for dilution for the Holyoke WPCF discharge. The dilution factor used in the development of certain permit limitations is, therefore, calculated as follows:

$$\begin{aligned} (\text{Discharge (cfs)} + 7\text{Q10 (cfs)}) \div \text{Discharge (cfs)} &= \text{Dilution Factor (DF)} \\ (27.0 \text{ cfs} + 1,775 \text{ cfs}) \div 27.0 &= 67 \end{aligned}$$

BOD and TSS

Under Section 301(b)(1)(B) of the Clean Water Act (CWA), Publicly Owned Treatment Works (POTW's) must have achieved effluent limitations based upon secondary treatment by July 1, 1977. The secondary treatment requirements are set forth in 40 CFR Part 133. The regulations describe the secondary treatment requirements for biochemical oxygen demand (BOD₅), Total Suspended Solids (TSS), and pH. The average monthly and average weekly concentration limits for BOD₅ and TSS are 30 mg/l and 45 mg/l, respectively, as set forth in 40 CFR §133.102. Including mass limits for these parameters is consistent with 40 CFR § 122.45 (f)(1) and (2).

The mass limits are calculated as follows:

$$\begin{aligned} \text{Average monthly mass} &= 17.5 \text{ mgd} \times 8.34 \text{ (conversion factor)} \times 30 \text{ mg/l} = 4379 \text{ lbs/day} \\ \text{Average weekly mass} &= 17.5 \text{ mgd} \times 8.34 \times 45 \text{ mg/l} = 6568 \text{ lbs/day} \end{aligned}$$

The 30-day average percent removal limit of at least 85% for BOD₅ and TSS is based on the requirements in 40 CFR §133.102.

pH, Fecal Coliform and E. coli

The limitations for pH and fecal coliform are based upon the Massachusetts state certification requirements under Section (401) (a) (1) of the Clean Water Act, as defined in 40 CFR§124.53 and water quality standards. The disinfection season is at the discretion of the State and recognizes that secondary contact recreation, such as boating and fishing, is likely to occur from the early spring through the autumn months.

On December 29, 2006 the State approved Water Quality Standards which includes a revision to the bacteria criteria. Several scientific studies have demonstrated that E. coli is a better indicator than coliform of potential human health effects of bacteria from certain recreational uses, such as swimming. This revision is currently under review by EPA and has not yet been formally approved. Consequently, the draft permit contains a monthly reporting requirement for E. coli during the disinfection season.

Total Residual Chlorine

The months of the year during which the limits are in effect are at the discretion of the MassDEP. Because chlorine and chlorine compounds can be extremely toxic to aquatic life, it is preferable to limit the discharge of chlorine to the receiving water to those months when primary and secondary contact recreational activities may occur.

Total Residual Chlorine (TRC) water quality criteria are established in the Gold Book and the subsequent 2002 update and are adopted into the State Water Quality Standards. The instream criteria shall not exceed 11 ug/l for chronic toxicity and 19 ug/l for acute toxicity to protect aquatic life. The TRC permit limit calculations based upon the dilution factor of 67 are shown below.

Chronic chlorine limit	$11 \text{ ug/l} * 67 \text{ (DF)} = 740 \text{ ug/l} = 0.74 \text{ mg/l}$
Acute chlorine limit	$19 \text{ ug/l} * 67 \text{ (DF)} = 1,273 \text{ ug/l} = 1.27 \text{ mg/l}$

The calculated average monthly limit of 0.74 mg/l is the same as in the current permit. The calculated maximum daily limit of 1.27 mg/l is less stringent than the current permit limit of 1.0 mg/l. Based on anti-backsliding, this draft permit maintains the maximum daily limit of 1.0 mg/l

Nitrogen

The Long Island Sound Comprehensive Conservation and Management Plan (CCMP) identifies excessive discharges of nitrogen from sewage treatment plants as the primary cause of low dissolved oxygen levels in the Sound. This condition is the most serious water quality impairment in the Sound and reduces the viable habitat to support fish. Because the Connecticut River is tributary to Long Island Sound, the EPA has required nitrogen monitoring for facilities discharging to the Connecticut River in Massachusetts. The development of nitrogen loadings of all tributaries to the Sound will be part of the Agency's approach to establish a nitrogen control strategy. Therefore, the current nitrogen monitoring requirements are maintained in this draft permit.

Metals

Metals permit limits are calculated based upon the dilution factor and the water quality criteria and are established based upon the reasonable potential of the discharge to exceed the instream water quality criteria. The *EPA Quality Criteria for Water, 1986 (Gold Book)* set forth the methodology for establishing water quality criteria for metals, some of which are hardness dependent. In the *National Recommended Water Quality Criteria: 2002* EPA updated its national recommended water quality criteria for pollutants. Using a hardness of 30 mg/l for the receiving water, from recent analyses of WET test diluent water, metal limits were calculated and compared to the chemical analyses results from the WET tests. There appears to be no reasonable potential for the Holyoke WPCP's discharge to exceed the water quality instream criteria. Consequently, no metals limits are necessary.

Whole Effluent Toxicity

National studies conducted by the Environmental Protection Agency have demonstrated that

domestic sources contribute toxic constituents to POTWs. These constituents include metals, chlorinated solvents, aromatic hydrocarbons, and other constituents. Additionally, as previously discussed, the POTW receives significant amounts of industrial wastewater which may contain toxic constituents. The Region's current policy is to include toxicity testing requirements in all municipal permits, while Section 101(a)(3) of the CWA specifically prohibits the discharge of toxic pollutants in toxic amounts.

Based on the potential for toxicity resulting from domestic and industrial contributions and the water quality standards and in accordance with EPA regulation and policy, the draft permit includes acute effluent toxicity limitations 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); and EPA's Technical Support Document for Water Quality-Based Toxics 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 including any synergistic effects of pollutants; and (3) pollutants for which there are inadequate chemical analytical methods or criteria can be addressed. Therefore, toxicity testing is being used in conjunction with pollutant specific control procedures to control the discharge of toxic pollutants.

Pursuant to EPA Region 1 policy, and MassDEP's Implementation Policy for the Control of Toxic Pollutants in Surface Waters February 23, 1990, discharges having a dilution ratio of between 20:1 and 100:1 require acute toxicity testing four times per year with an LC₅₀ equal to 100%.

The EPA and the MassDEP have a policy that these agencies will consider reducing the species requirement in the toxicity tests from two species to one species; if after an extended period of testing, the effluents show no chronic effects to the test organisms. Based upon a past data review, the current permit required testing for the daphnid, *Ceriodaphnia dubia*, only. The draft permit retains that same testing requirement.

V. COMBINED SEWER OVERFLOWS (CSOs)

1. Background

Combined sewer systems are wastewater collection systems designed to carry sewage and storm water in a single pipe. Flows in combined sewers can be classified as dry weather flow or wet weather flow.

Dry weather flow is the flow in a combined sewer that results from domestic, commercial, and industrial wastewater and groundwater infiltration with no contribution from storm water runoff or storm water induced infiltration. Dry weather overflows from CSOs are illegal and must be immediately reported to EPA and the MassDEP. Dry weather overflows must be eliminated as expeditiously as possible.

Wet weather flow is a combination of domestic, commercial, and industrial wastewater, groundwater infiltration, and stormwater flow including snowmelt. In periods of wet weather or

snowmelt the combined wastewater flows can exceed the interceptor or regulator capacity of the combined sewers and/or treatment facilities. When this occurs, the combined wastewater can overflow and discharge directly to surface waters, i.e. a combined sewer overflow (CSO). CSOs are distinguished from bypasses which are “intentional diversions of waste streams from any portion of the treatment facility” (40 CFR §122.41 (m)).

The objectives of the National CSO Control Policy are:

- 1) To ensure that if the CSO discharges occur, they are only as a result of wet weather;
- 2) To bring all wet weather CSO discharge points into compliance with the technology based requirements of the CWA and applicable federal and state water quality standards; and
- 3) To minimize water quality, aquatic biota, and human health impacts from wet weather flows.

2. Effluent Standards

CSOs are point sources subject to NPDES permit requirements for both water-quality based and technology-based requirements but are not subject to the secondary treatment regulations applicable to publicly owned treatment works in accordance with 40 CFR §133.103(a) *Combined sewers*.

As noted above, Section 301(b)(1)(C) of the Clean Water Act of 1977 mandated compliance with water quality standards by July 1, 1977. Technology-based permit limits must be established for best conventional pollutant control technology (BCT) and best available technology economically achievable (BAT) based on best professional judgment (BPJ) in accordance with Section 301(b) and Section 402(a) of the Water Quality Act Amendments of 1987 (WQA).

3. Conditions for Discharge

The draft permit prohibits dry weather discharges from CSO outfalls. During wet weather, the discharges must not cause any exceedance of water quality standards. Dry weather discharges must be immediately reported to EPA and MassDEP. Wet weather discharges must be monitored and reported as specified in the permit.

4. Nine Minimum Controls (NMC)

The permittee must comply with BPJ derived BCT/BAT controls which, at a minimum, include the following: (1) proper operation and maintenance of the sewer system and outfalls, (2) maximum use of the collection system for storage, (3) review pretreatment programs to assure that CSO impacts are minimized, (4) maximization of flow to the POTW for treatment, (5) prohibition of dry weather overflows, (6) control of solid and floatable materials in the discharge, (7) pollution prevention programs which focus on contamination 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.

5. Nine Minimum Controls Documentation

In July, 1999, the permittee updated its long-term CSO control plan in a draft report titled "Evaluation of CSO Abatement Program" which included the Nine Minimum Controls. The draft permit requires the permittee to implement the nine minimum controls that are listed and described in the permit. The draft permit also requires an annual report providing a summary of modifications to the approved NMC program which have been evaluated and a description of those which will be implemented during the upcoming year.

6. Reopener/Additional CSO Control Measures

The permit requires monthly inspections of each CSO structure/regulator. The results of the inspections including any necessary maintenance are to be recorded and maintained for at least three (3) years. By January 15th of each year, the permittee submit a certification to the EPA and the MassDEP that the previous year's inspections have been conducted and records maintained. The permit also requires that all discharges from combined sewer outfalls shall be quantified and recorded. The permit requires that these records be maintained for at least six (6) years. In addition, the permit requires that identification signs be maintained at all CSO structures.

The permit maybe modified or reissued upon completion of a long-term CSO control plan. Such modification may include performance standards for selected controls, a post construction water quality assessment program, monitoring for compliance with water quality standards, and a reopener clause to be used in the event that he selected CSO controls fail to meet water quality standards. Section 301(b)(1)(C) requires that a permit include limits that may be necessary to protect water quality standards.

7. Required Treatment

EPA's national CSO policy ("CSO policy") published in the Federal Register on April 19, 1994 (59 FR 18688) requires that a permittee develop and submit a long-term CSO control plan which complies with the requirements of the CSO policy. As previously mentioned, the City submitted the most recent update, "Evaluation of CSO Abatement Program" in 1999. Schedules for implementing the required CSO abatement facilities are contained in a federal court order.

VI. Pretreatment Program

There are six Categorical Industrial Users (CIUs) discharging to the Holyoke WPCF. These dischargers are listed in Attachment 3.

The permittee is required to administer a pretreatment program based on the authority granted under 40 CFR §122.44(j), 40 CFR Part 403 and section 307 of the Act. The Permittee's pretreatment program received EPA approval on July 22, 1985. As a result, appropriate pretreatment program requirements were incorporated into the previous permits which were

consistent with that approval and federal pretreatment regulations in effect when the permits were issued.

The Federal Pretreatment Regulations in 40 CFR Part 403 were amended in October 1988, and again in July 1990. Those amendments established new requirements for implementation of pretreatment programs. Upon reissuance of this NPDES permit, the permittee is obligated to modify its pretreatment program to be consistent with current Federal Regulations. Those activities that the permittee must address include, but are not limited to, the following: (1) develop and enforce EPA approved specific effluent limits (technically-based local limits); (2) revise the local sewer-use ordinance or regulation, as appropriate, to be consistent with Federal Regulations; (3) develop an enforcement response plan; (4) implement a slug control evaluation program; (5) track significant noncompliance for industrial users; and (6) establish a definition of and track significant industrial users.

These requirements are necessary to ensure continued compliance with the POTW's NPDES permit and its sludge use or disposal practices.

In addition to the requirements described above, the draft permit requires the permittee to submit to EPA in writing, within 120 days of the permit's effective date, a description of proposed changes to permittee's pretreatment program deemed necessary to assure conformity with current federal pretreatment regulations. These requirements are included in the draft permit to ensure that the pretreatment program is consistent and up-to-date with all pretreatment requirements in effect. Lastly, the permittee must continue to submit, annually on August 1, a pretreatment report detailing the activities of the program for the twelve month period ending 60 days prior to the due date.

The permit requires the permittee to submit to EPA, within 120 days of the permit's effective date, all required modifications of the Streamlining Rule in order to be consistent with the provisions of the newly promulgated Rule. To the extent the permittee's legal authority is not consistent with the required changes, they must be revised and submitted to EPA for review.

VII. Operation and Maintenance

Regulations regarding proper operation and maintenance are found at 40 CFR § 122.41(e). These regulations require "that the permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit." The treatment plant and collection system are included in the definition "facilities and systems of treatment and control" and are therefore subject to proper operation and maintenance requirements.

Similarly, permittees have a 'duty to mitigate' as stated in 40 CFR §122.41 (d). This requires the permittees to "take all reasonable steps to minimize or prevent any discharge in violation of the permit which has a reasonable likelihood of adversely affecting human health or the environment."

General requirements for proper operation and maintenance, and mitigation have been included in Part II of the permit. Specific permit conditions have also been included in Part I.B., I.C. and

I.D. of the draft permit. These requirements include reporting of unauthorized discharges including SSOs, maintaining an adequate maintenance staff, performing preventative maintenance, controlling inflow and infiltration in separate sewers to the extent necessary to prevent SSOs and I/I related effluent violations at the wastewater treatment plant, and maintaining alternate power where necessary.

VIII. 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 Fisheries Services (NOAA Fisheries) if EPA's action or proposed action that it funds, permits, or undertakes, may adversely impact any essential fish habitat (EFH). 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 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.

Anadromous Atlantic salmon (*Salmo Salar*) is the only managed species believed to be present during one or more lifestages within the area which encompasses the discharge site. This section of the Connecticut River is classified by the State as a warm water fishery.

EPA has concluded that the limits and conditions contained in this draft permit minimize adverse effects to Atlantic Salmon EFH for the following reasons:

- This is a re-issuance of an existing permit.
- The dilution factor (67) is high.
- Acute toxicity tests will be conducted on *Ceriodaphnia dubia* and current results of the toxicity tests are in compliance with the permit limits;
- The permit will prohibit violations of the state water quality standards.

EPA believes that the draft permit limits adequately protect Atlantic Salmon EFH, and therefore additional mitigation is not warranted. If adverse impacts to EFH are detected as a result of this permit action, or if new information is received that changes the basis for our conclusion, NOAA Fisheries will be notified and an EFH consultation will be reinitiated.

IX. Endangered Species Act (ESA)

Under Section 7 of the Endangered Species Act, federal agencies are required to ensure that any action they conduct, authorize, or fund is not likely to jeopardize the continued existence of a federally listed species, or result in the adverse modification of critical habitat. EPA has initiated informal consultation with both NOAA Fisheries and the United State Fish and Wildlife Service

(USFWS) concerning listed species under their purviews. Listed species in the Hampden County area include shortnose sturgeon (*Acipenser brevirostrom*) for NOAA Fisheries and the bald eagle (*Haliaeetus leucocephalus*) for USFWS.

EPA believes the authorized discharge from this facility is not likely to adversely affect any federally-listed species, or their habitats. This preliminary determination is based on the location of the outfall, and the reasons provided in the EFH discussion (Section VIII. of this Fact Sheet). EPA is seeking concurrence with this opinion from NOAA Fisheries and USFWS through the informal ESA consultation process.

X. Sludge

Section 405(d) of the CWA requires that EPA develop technical standards regulating the use and disposal of sewage sludge. These regulations were signed on November 25, 1992, published in the Federal Register on February 19, 1993, and became effective on March 22, 1993. Domestic sludge which is land applied, disposed of in a surface disposal unit, or fired in a sewage sludge incinerator are subject to Part 503 technical standards. Part 503 regulations have a self-implementing provision, however, the CWA requires implementation through permits. Domestic sludge which is disposed of in a municipal solid waste landfill is in compliance with Part 503 regulations provided that the sludge meets the quality criteria of the landfill and the landfill meets the requirements of 40 C.F.R. Part 258.

The draft permit requires that sewage sludge use and disposal practices meet Section 405(d) Technical Standards of the CWA. In addition, the EPA Region I – NPDES Permit Sludge Compliance Guidance document dated November 4, 1999. This document is included with the draft permit for use by the permittee in determining their appropriate sludge conditions for their chosen method of sludge disposal. The permittee is required to submit to EPA and to MassDEP annually, by February 19th, the various sludge reporting requirements as specified in the guidance document for the chosen method of sludge disposal.

The permittee generates about 3,213 dry metric tons of sludge per year. The sludge is transported by a contractor and disposed in a municipal solid waste landfill.

XI. State Certification Requirements

EPA may not issue a permit unless the Massachusetts Department of Environmental Protection with jurisdiction over the receiving waters certifies that the receiving waters certifies that the effluent limitations in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Water Quality Standards. The staff of the Massachusetts Department of Environmental Protection has reviewed the draft permit and advised the EPA that the limitations are adequate to protect water quality. EPA has requested permit certification by the State pursuant to 40 CFR 124.53 and expects that the draft permit be certified.

XII. Comment Period and Procedures for Final Decisions

All persons, including applicants, who believe any condition of the 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 contacts listed below. 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 to be raised in the hearing. A public hearing may be held after at least thirty (30) 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 the public hearing, if held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and to each person who has submitted written comments or requested notice.

Permits may be appealed to the Environmental Appeals Board in the manner described at 40 CFR § 124.19.

XIII. EPA and MassDEP Contacts

Additional information concerning the draft permit may be obtained between the hours of 9 am and 5 pm, Monday through Friday from:

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