In Re:

CITY OF EASTPORT (MAIN PLANT)	)	
EASTPORT, WASHINGTON COUNTY, MAINE	)	TENTATIVE DECISION
PUBLICLY OWNED TREATMENT WORKS,	)	OF THE REGIONAL
APPLICATION FOR SECTION 301(h)	)	ADMINISTRATOR PURSUANT TO
VARIANCE FROM THE SECONDARY	)	40 CFR PART 125, SUBPART G
TREATMENT REQUIREMENTS OF THE	)	
CLEAN WATER ACT	)	
	)	

The City of Eastport's Main treatment facility (Eastport hereinafter), is a publicly owned treatment works located in the City of Eastport, Maine. Eastport has submitted a waiver application pursuant to Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987 (the Act). The U.S. Environmental Protection Agency (EPA hereinafter) has reviewed the merits of this application for the waiver request. Based on this review, it is my tentative decision that Eastport should receive a 301(h) waiver from secondary treatment standards in accordance with the terms, conditions, and limitations proposed in the modified 301(h) National Pollutant Discharge Elimination System (NPDES) permit.

Eastport's application is seeking approval for the discharge of up to a monthly average of 820,000 gallons per day of primary treated waste water generated by commercial and residential entities. Eastport is seeking renewal of its variance from the secondary treatment requirements of the Clean Water Act, as amended by the Act pursuant to Section 301(h) that was originally granted by the EPA on May 9, 1985 and subsequently renewed on August 13, 2002. The Eastport's application is based on an improved discharge as defined at 40 CFR § 125.58. It is my tentative decision that the City of Eastport be granted a renewal of the variance in accordance with the terms, conditions, and limitations of the attached evaluation. This determination is subject to concurrence by the State of Maine as required by Section 301(h) of the Act. Region I has prepared a draft NPDES permit in accordance with this decision.

Because my decision is based on available evidence specific to this particular discharge, it is not intended to assess the need for secondary treatment by other publicly owned treatment works discharging to the marine environment. This decision and the NPDES permit implementing this decision are subject to revision on the basis of subsequently acquired information relating to the impacts of the less-than-secondary discharge on the marine environment.

Pursuant to the procedures of the NPDES Permit Regulations, 40 CFR Part 124, a public notice will be issued which describes the comment procedures that are available to interested persons in regard to this decision and its accompanying draft NPDES permit.

Date:

Robert W. Varney
Regional Administrator
Environmental Protection Agency
Region I

TENTATIVE DECISION DOCUMENT

ANALYSIS OF THE APPLICATION FOR A SECTION 301(h)

SECONDARY TREATMENT VARIANCE

FOR

THE CITY OF EASTPORT'S

WASTE WATER TREATMENT PLANT

MAIN PLANT

ENVIRONMENTAL PROTECTION AGENCY
REGION I - NEW ENGLAND

August 2008

Table of Contents

SUMMARY

The applicant, the City of Eastport (Eastport hereinafter) is seeking a variance from secondary treatment requirements for the discharge of up to 820,000 gallon per day (gpd) of sanitary waste water. The treatment plant facility is located in the Town of Eastport, Maine and discharges its effluent to Passamaquoddy Bay, a Class SC waterway according to 38 Maine Revised Statutes Annotated (M.R.S.A.) §469. See Attachment A of the Fact Sheet of the permit for a location map.

The EPA followed the guidance provided in EPA's Amended Section 301(h) Technical Support Document (1994) for evaluating the improved discharge for a small applicant (average dry weather flows below 5.0 MGD). The Region relied on information in a document entitled "301(h) Facilities in Maine, Report of 1995 Monitoring Activities," prepared by the State of Maine's Department of Environmental Protection (MEDEP) and submitted to EPA in July 1996 as well as monthly compliance date generated by Eastport for the period March 2002 through December 2007 as required by the terms and conditions of the most current NPDES permit.

The applicant's receipt of a Section 301(h) variance from secondary treatment is contingent upon the following conditions:

1. The treatment system's ability to maintain an average monthly 30 percent (%) removal rate of five-day biochemical oxygen demanding (BOD_5) material and 50% removal for total suspended solids (TSS) (State of Maine Section 401 Water Quality Certification Condition), and;

2. The discharge's ability to meet all water quality standards at the edge of the zone of initial dilution with the discharge from the improved outfall, and;

3. State Certification under 401 of the Act regarding compliance with State law and State Water Quality Standards, including a basis for the conclusion reached.

I. INTRODUCTION

The City of Eastport (Eastport hereinafter) has requested a renewal of its five-year variance from the secondary treatment requirements for its publicly owned treatment works (POTW) pursuant to Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987. This tentative decision document summarizes the findings, conclusions and recommendations of the New England Region of the Environmental Protection Agency (EPA) with regard to Eastport's 301(h) waiver request. The conclusions and recommendations in this document are based on the application of the requirements set forth in 40 CFR Part 125, Subpart G (revised on August 9, 1994) to Eastport's discharge.

The applicant's most recent Section 301(h) modified National Pollutant Discharge Elimination System (NPDES) permit expired on August 13, 2007. Eastport submitted an application for a renewal of its Section 301(h) variance on August 21, 2007. The EPA applied the criteria established in 40 CFR Part 125, Subpart G, "Criteria for Modifying the Secondary Treatment Requirements Under Section 301(h) of the Clean Water Act," in acting on this request.

II. DESCRIPTION OF TREATMENT FACILITY

The Eastport Main facility provides a primary level of treatment by (1) screening and grit removal, (2) two primary treatment Imhoff tanks (3) prechlorination (if needed), (4) chlorination and dechlorination, (5) effluent flow metering, (6) sampling of effluent quality, (7) sludge removal, mixing, drying and stabilization (8) lime, polymer and potassium permanganate chemical addition facilities, and a Control Building. The treated effluent is discharged to Passamaquoddy Bay by way of a twenty four (24) inch diameter pipe that is submerged at mean low water.

Waste water enters the treatment plant through a 10-inch diameter force main to an influent channel to the screening and grit removal facilities. Following screening and grit removal the waste water is conveyed by gravity to a weir controlled flow splitting structure which controls flow into the two Imhoff treatment tanks. The sludge and scum are stored in the lower compartment of the tank for anaerobic digestion and then seasonally disposed of by liquid sludge land application or dewatered in the on-site drying beds and either land filled or sent to another appropriate facility for further treatment and disposal. The waste water flows from the Imhoff tanks to the chlorine contact tank for disinfection. The waste water is disinfected by the addition of chlorine in a mixing chamber at the head end of the contact tank. The waste water is dechlorinated at the tail end of the chlorine contact tank in another mixing chamber. Effluent flow is monitored and sampled prior to discharge to Passamaquoddy Bay via the ocean outfall. See Attachment B of the Fact Sheet of the permit for a schematic of the waste water treatment processes.

III. DESCRIPTION OF RECEIVING WATER

Passamaquoddy Bay is a marine water subject to tidal action with a differences in tides (mean high to mean low) of up to 20 feet with very strong currents. Maine law, 38 M.R.S.A., §469 classifies the receiving waters at the point of discharge as Class SC waters. Maine law, 38 M.R.S.A., Section 465-B(2) contains the classification standards for Class SB waters. See Section V(B) of this document for a description of the designated uses as well as numeric and narrative water quality standards for Class SC waters.

The Eastport waste water treatment facility discharges to a shellfish harvesting area that the Maine Department of Marine Resources (DMR) has designated as shellfish Area #59(B), Eastport. See Attachment C of the Fact Sheet of the permit for a map depicting Area #59(B).

IV. PHYSICAL CHARACTERISTICS OF THE DISCHARGE

A. Dilution Factors

Pursuant to 40 CFR 125.62(a), the outfall and diffuser must be located and designed to provide adequate initial dilution, dispersion, and transport of waste water to meet all applicable water quality standards at and beyond the boundary of the zone of initial dilution (ZID) during periods of maximum stratification and during other periods when more critical situations may exist.

The effluent from the Eastport waste water treatment facility is conveyed to Passamaquoddy Bay via a polyvinylchloride (PVC) outfall pipe measuring twenty-four (24) inches in diameter. At the time of the previous permitting action the outfall pipe extended out into the receiving water approximately 500 feet with approximately twenty (20) feet of water over the crown of the pipe at high tide and nine (9) feet at mean low water. MEDEP rule, 06-096 CMR Chapter 530.5 *Surface Water Toxics Control Program,* §4(a)(2) states:

(1) *For estuaries where tidal flow is dominant and marine discharges, dilution factors are calculated as follows. These methods may be supplemented with additional information such as current studies or dye studies.*

(a) For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.

(b) For discharges to estuaries, dilution must be calculated using a method such as MERGE, CORMIX or another predictive model determined by the Department to be appropriate for the site conditions.

IV. PHYSICAL CHARACTERISTICS OF THE DISCHARGE (cont'd)

(c) In the case of discharges to estuaries where tidal flow is dominant and marine waters, the human health criteria must be analyzed using a dilution equal to three times the chronic dilution factor.

Based on plan and profile information submitted to the Department, the Department determined through CORMIX modeling, the dilution factors associated with the facility at the permitted flow of 820,000 gpd were as follows.

Acute = 14:1 Chronic = 341:1 Harmonic mean = 1,023 **(1)**

(1) Pursuant to Department rule 06-096 CMR Chapter 530, §4(2)(c), the harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by a factor of three (3).

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA

A. Primary or equivalent treatment requirements [40 CFR 125.60]

Federal regulation 40 CFR 125.60 specifies that the applicant shall demonstrate that its effluent has received at least primary or equivalent treatment. Primary or equivalent treatment is defined as: "treatment by screening, sedimentation, and skimming adequate to remove 30 percent of the biochemical oxygen demanding (BOD) material and 30 percent of the total suspended solids (TSS) in the treatment works influent, and disinfection, where appropriate." (See definition at 40 CFR 125.58(r)). It is noted the MEDEP considers 50% removal of the TSS as best practicable treatment (BPT).

The previous NPDES permit established monthly average technology based mass and concentration limits for BOD and TSS with a monitoring frequency of 1/Week. The limitations were calculated based on an assumed influent concentration of 290 mg/L for each parameter and a 30% removal for BOD and a 50% removal for TSS. This assumed value is based on the EPA Design Manual, Onsite Wastewater Treatment and Disposal Systems, dated October 1980, table 4-3 entitled "Characteristics of Typical Residential Wastewater" high range of values for BOD5 and TSS. Derivation of the limits is as follows:

BOD: 290 mg/L – [(290 mg/L)(0.30)] = 203 mg/L
(203 mg/L)(8.34)(0.820 MGD) = 1,388 lbs/day

A review of the DMR data for the period April 2005 – March 2007 inclusively, indicates the monthly average concentration of BOD discharged has ranged from 88 mg/L to 332 mg/L with an arithmetic mean of 227 mg/L. As for the monthly average mass of BOD discharged, the DMR data indicates the range has been from 108 lbs/day to 632 lbs/day with an arithmetic mean of 224 lbs/day. Monthly average removal rates for BOD for said period range from 30% - 68% with an arithmetic mean of 49%.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

TSS: 290 mg/L – [(290 mg/L)(0.50)] = 145 mg/L
(145 mg/L)(8.34)(0.820 MGD) = 992 lbs/day

A review of the DMR data for the period April 2005 – March 2007 inclusively, indicates the monthly average concentration of TSS discharged has ranged from 6 mg/L to 34 mg/L with an arithmetic mean of 19 mg/L. As for the monthly average mass of TSS discharged, the DMR data indicates the range has been from 5 lbs/day to 49 lbs/day with an arithmetic mean of 20 lbs/day. Monthly average removal rates for TSS for said period range from 87% - 97% with an arithmetic mean of 93%.

Since issuance of the previous NPDES permit (August 2002) there has never been any excursion of the technology based mass limitations for BOD & TSS.
Therefore, the facility currently meets the requirements of 40 CFR Part 125.60.

B. Existence of and Compliance with Applicable Water Quality Standards [40 CFR 125.61]

40 CFR 125.61(a) specifies that there must be a water quality standard applicable to each pollutant for which a modification is requested. The applicant must: (1) demonstrate that the modified discharge will comply with such water quality standards (40 CFR 125.61(b)(1)), and; (2) provide a determination, signed by the "certifying authority" (i.e., the MEDEP), that the proposed modified discharge will comply with applicable provisions of State law, including water quality standards (40 CFR 125.61(b)(2)).

The State of Maine has adopted water quality standards including water use classifications. At the point of discharge, Passamaquoddy Bay is classified as Class SC pursuant to Maine law, 38 M.R.S.A., §469. Maine law 39 M.R.S.A §465-B(3) contains the standards for Class SB waters as follows:

Class SC waters must be of such quality that they are suitable for recreation in and on the water, fishing, aquaculture, propagation and restricted harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as a habitat for fish and other estuarine and marine life.

The dissolved oxygen content of Class SC waters must be not less than 70% of saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 14 per 100 milliliters or an instantaneous level of 94 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in restricted shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration

Discharges to Class SC waters may cause some changes to estuarine and marine life provided that the receiving waters are of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community

Federal regulation 40 CFR, Part 125, Subpart G, more specifically Part 125.57(a)(2), states that discharge of pollutants in accordance with such modified requirements [301(h)] will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife, and allows recreational activities in and on the water.

Maine law 38 M.R.S.A., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program,* require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants,* and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

The water quality standards applicable to the pollutants for which a 301(h) modified permit is requested are discussed below. Additional relevant water quality standards are discussed in Section V(C) of this document.

(1) Dissolved Oxygen (DO) [40 CFR Section 125.61(a)(1)]

Maine law, 38 MRSA, §465-B(3)(B) specifies that Class SC waters shall have a dissolved oxygen content of at least 70% of saturation.

There is limited data in the vicinity of the discharge for average daily DO concentrations. EPA believes however, that average daily concentrations would likely be greater than the 70% saturation standard found in Maine law. This belief is based on the fact that in the summer of 1995, the MEDEP and the EPA conducted a portion of the Biological Monitoring requirements (TVS sampling) and Water Quality Monitoring contained in the 1985 State waste discharge license and federal NPDES permit at certain 301(h) facilities. The MEDEP and EPA agreed that the SCUBA inspection was too dangerous as a result of the swift current in the receiving waters. The Department has made the determination that,

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

based on the sampling to date and past effluent monitoring data, the discharge complies with 40 CFR, §125.57(a)(2). According to a document entitled "301(h) Facilities in Maine, Report of 1995 Monitoring Activities," prepared by the Department, dated July 1996 and submitted to EPA, "Water quality, sediment, and photographic information indicates that these [301(h)-type] discharges are not causing any significant impact to the receiving waters". That document concluded that no further ambient monitoring be conducted, and recommended that effluent monitoring be continued. By letter dated February 17, 1995 from the EPA Regional Administrator, the EPA found there would be little risk of adverse impacts to the receiving waters from these discharges provided that the permittee perform effluent monitoring as part of the regular permit conditions. The proposed NPDES permitting action associated with this decision requires said effluent monitoring. The EPA has determined that the DO levels in the vicinity of the improved discharge will likely meet the State water-quality standards.

(2) Fecal coliform bacteria [40 CFR Section 125.61(a)(3)]

Maine law 38 M.R.S.A. §465-B(3)(B) specifies that the numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program.

The previous permitting action established monthly average (geometric mean) and daily maximum limits for fecal coliform bacteria of 15 colonies/100 ml and 50 colonies/100 ml respectively, that are consistent with limitations in the National Shellfish Sanitation Program. The numeric limitations are being carried forward in this permitting action along with a monitoring frequency of 1/Week. To be consistent with the previous permitting action issued by the Department and EPA, this permitting action is establishing year-round disinfection to protect the health and welfare of the general public.

A review of the DMR data for the period April 2005 – March 2007 indicates the monthly average (geometric mean) fecal coliform bacteria levels discharged have ranged from 1.4 – 5.6 colonies/100 mL with an arithmetic mean of 4 colonies/100 mL and the daily maximum levels have ranged from <4 – 9 colonies/100 mL with an arithmetic mean of 6 colonies/100 mL. Since issuance of the previous NPDES permit (August 2002) there has never been any excursions of the water quality based concentration limitations for fecal coliform bacteria. Therefore, the facility currently meets the requirements of 40 CFR Part 125.60.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

(3) pH [40 CFR Section 125.61(a)(3)]

Maine law 38 M.R.S.A. §464(4)(A)(5) specifies that no discharge shall cause the pH of marine water to fall outside the range of 7.0 – 8.5 standard units. The previous NPDES permit established a BPT pH range limit of 6.0 –9.0 standard units pursuant to Department rule, 06-096 CMR Chapter 525(3)(III)(c), along with a monitoring frequency of 1/Day. A review of the DMR data for the period April 2005 – March 2007 indicates there has never been any excursions of the pH range limitation. Therefore, the facility currently meets the requirements of 40 CFR Part 125.60.

(4) Toxic pollutants [40 CFR Section 125.61(a)(3)]

Maine law 38 M.R.S.A. § 420 prohibits dischargers from discharging toxic pollutants in toxic amounts. MEDEP rule, 06-096 CMR Chapter 584 establishes numeric ambient water quality criteria for pollutants known to be toxic to aquatic life or harmful to humans. The only pollutant discharged from the Eastport facility that may be discharged in toxic amounts is chlorine as it used as a disinfectant of the final effluent from the facility.

The August 2002 NPDES permit established a water quality based daily maximum limitation of 0.18 mg/L for total residual chlorine with monitoring frequency of 1/Day. Limits on total residual chlorine are specified to ensure attainment of the in-stream water quality criteria for chlorine and that BPT technology is utilized to abate the discharge of chlorine. Permits issued by this Department impose the more stringent of the calculated water quality based or BPT based limits. The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine based compounds unless the calculated acute water quality based threshold is lower than 1.0 mg/L. For facilities that need to de-chlorinate the discharge to meet water quality based thresholds, the Department has established daily maximum and monthly average best practicable treatment limits of 0.3 mg/L and 0.1 mg/L respectively

Water quality based thresholds for TRC can be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	0.013 mg/L	0.0075 mg/L	14:1	341:1	0.18 mg/L	2.6 mg/L

Example calculation: Acute – 0.013 mg/L (14) = 0.18 mg/L

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

Being that the acute water quality based daily maximum threshold calculated above is more stringent than the Department's BPT limit of 0.3 mg/L, the water quality based limit of 0.18 mg/L is being carried forward in this permitting action along with the monitoring frequency of 1/Day.

A review of the DMR data for the period April 2005 – March 2007 indicates the daily maximum TRC discharged has ranged from 0.01 mg/L to 0.02 mg/L with an arithmetic mean of 0.01 mg/L and has never been exceeded during said period. Therefore, the facility currently meets the requirements of 40 CFR Part 125.60.

C. Attainment or maintenance of water quality which assures protection of public water supplies; assures the protection and propagation of a balanced indigenous population (BIP) of shellfish, fish and wildlife; and allows recreational activities [40 CFR 125.62]

(1) At the time the 301(h) modification becomes effective, the applicant's outfall and diffuser must be located and designed to provide adequate initial dilution, dispersion, and transport of wastewater such that the discharge does not exceed at or beyond the zone of initial dilution all applicable water quality standards [40 CFR 125.62(a)(1)(i)]

The State of Maine has applicable State water quality standards that directly correspond to the CWA Section 304(a)(1) water quality criterion. Modeling performed by the Department indicates the outfall will provide adequate dilution, dispersion, and transport of waste water such that the discharge will not exceed, at or beyond the zone of initial dilution, any applicable water-quality standards. See Section V(A)(1) of this document for the dilution factors calculated.

(2) Impact of the Discharge on Public Water Supplies [40 CFR 125.62(b)]

The Eastport discharge will not have an impact on public drinking water supplies as the facility discharges to a marine environment and the EPA and MEDEP are not aware of any proposals to construct a desalination plant in the vicinity of the Eastport discharge location.

(3) Biological Impact of Discharge. [40 CFR 125.62(c)]. The discharge must allow for the attainment or maintenance of water quality which assures protection and propagation of a balanced indigenous population (BIP) of fish, shellfish, and wildlife (40 CFR 125.62(c)(1)). A BIP must exist immediately beyond the boundary of the zone of initial dilution (ZID) and in all areas beyond the ZID that are actually or potentially affected by the applicant's discharge (40 CFR 125.62(c)(2)).

See the discussion in Section V(1) of this document.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

(4) Conditions within the zone of initial dilution must not contribute to extreme adverse biological impacts, including, but not limited to, the destruction of distinctive habitats of limited distribution, the presence of a disease epicenter, or the stimulation of phytoplankton blooms which have adverse effects beyond the zone if initial dilution. [40 CRF 125.62(c)(3)]

See the discussion in Section V(1) of this document.

(5) For modified discharges into saline estuarine water, the benthic population within the ZID must not differ substantially from the balanced indigenous populations which exist immediately beyond the boundary of the ZID; the discharge must not interfere with estuarine migratory pathways within the ZID; and the discharge must not result in the accumulation of toxic pollutants or pesticides at levels which exert adverse effects on the biota within the ZID. [40 CFR 125.62(c)(4)(i), (ii), and (iii)]

See the discussion in Section V(1) of this document.

(6) Impact of Discharge on Recreational Activities. The discharge must allow for the attainment or maintenance of water quality which allows for recreation activities beyond the zone of initial dilution, including, without limitation, swimming, diving, boating, fishing and picnicking, and sports activities along shorelines and beaches. [40 CFR 125.62(d)]

See the discussion in Section V(1) of this document.

(7) Additional requirements for applications based on improved or altered discharges [40 CFR 125.62(e)].

See the discussion in Section V(1) of this document.

(8) Stressed Waters [40 CFR 125.62(f)]

The State of Maine 2006 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, indicates that the Maine Department of Marine Resources (MEDMR) shellfish Area #59(B), Eastport, is closed to the harvesting of shellfish. See Attachment C of this document for the delineation of Area #59(B) The DMR has traditionally closed shellfish harvesting areas in the vicinity of outfall pipes when lack of field data on bacteria counts in the immediate area is insufficient, inconclusive or exceeds standards set in the National Shellfish Sanitation Program of the U.S. Department of Health and Human Services. The MEDMR issued the closure notice on February 6, 2007 based on ambient water quality sampling indicated elevated levels of bacteria.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

Compliance with the monthly average and daily maximum limitations for fecal coliform bacteria will ensure the Eastport waste water treatment facility will not cause or contribute to the closure of the shellfish harvesting area.

All estuarine and marine waters in Maine are listed in a table entitled, *Category 4-B-3: Estuarine and Marine Waters Impaired by Atmospheric Deposition of Mercury* of the aforementioned 305(b) report. Text in this category states that all waters in the category are partially supporting fishing (fish and shellfish consumption) due to elevated levels of mercury, PCBs and dioxin in tissues of some fish and lobster tomally. The MEDEP is not aware of any information that the Eastport waste water treatment facility is discharging PCBs or dioxin that may be causing or contributing to the partial non-attainment.

Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W002750-46-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 237 parts per trillion (ppt) and 355 ppt, respectively, and a minimum monitoring frequency requirement of two tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect. It is noted that the mercury effluent limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as the limits and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. The interim mercury limits remain in effect and enforceable and modifications to the limits and/or monitoring frequencies will be formalized outside of the permitting document pursuant to Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. Maine law 38 M.R.S.A., §420 sub-§(1-B)(B)(1) states that a facility is not in violation of an ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to §413, sub-§11.

D. Establishment of Monitoring Programs [40 CFR 125.63]

Federal regulation 40 CFR 125.63 requires that the applicant develop a monitoring program designed to evaluate the impact of the modified discharge on the marine biota, demonstrate compliance with applicable water quality standards, and measure toxic substances in the discharge. 40 CFR 125.63(a)(2) allows the Administrator to require revisions to the proposed monitoring program before issuance of a modified permit and during the term of any modified permit.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

(1) Establishment of Monitoring Program [40 CFR 125.63(a)(1)]

See the discussion in Section V(1) of this document.

(2) Small applicants are not subject to the requirements of 40 CFR 125.63(b)(1)(ii)-(iv) if they discharge at depths greater than 10 meters and can demonstrate through a suspended solids deposition analysis that there will be negligible seabed accumulation in the vicinity of the modified discharge [40 CFR 125.63(b)(2)]

See the discussion in Section V(1) of this document.

(3) For applicants seeking a section 301(h) modified permit based on an improved or altered discharge involving outfall relocation, the biological monitoring shall include the current discharge site until such discharge ceases (40 CFR 125.63(b)(3)(iii)(A)), and; shall provide baseline data at the relocation site (40 CFR 125.63(b)(3)(iii)(B))

See the discussion in Section V(1) of this document.

(4) Water Quality Monitoring Program [40 CFR 125.63(c)]

See the discussion in Section V(1) of this document.

(5) Effluent Monitoring Program [40 CFR 125.63(d)]

The draft NPDES permit contains monitoring conditions which shall provide data on the quality of the effluent including flow, BOD, TSS, settleable solids, total residual chlorine and pH.

E. Effect of Modified Discharge on Other Point and Nonpoint Sources [40 CFR 125.64]

40 CFR 125.64(a) states that no modified discharge may result in any additional pollution control requirements on any other point or nonpoint source.

40 CFR Part 125.64(b) requires that the applicant obtain a determination from the State or interstate agency having authority to establish waste load allocations indicating whether the applicant's discharge will result in any additional treatment pollution control, or other requirement on any other point or nonpoint source. The City of Eastport anticipates receiving said determination from the MEDEP prior to issuance of the final NPDES permit.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

F. Toxics Control Program [40 CFR 125.66]

(1) Identification of sources and Industrial Pretreatment Requirements [40 CFR 125.66(a)(1) and (2), 40 CFR 125.66(b), and 40 CFR 125.66(c)]

Given the nature of the source of the discharge, Eastport has determined to the best of their knowledge, there are no sources of toxic pollutants being conveyed to the treatment plant. Therefore, 40 CFR 125.66(a) - (c) does not apply.

(2) Nonindustrial Source Control Program [40 CFR 125.66(d)]

Under 40 CFR 125.66(d), the applicant must submit a proposed public education program designed to minimize the entrance of non-industrial toxic pollutants and pesticides into its POTW. See the discussion in Section V(F)(1) of this document.

G. Increase in Effluent Volume or Amount of Pollutants Discharged [40 CFR 125.67]

(1) 40 CFR 125.67(a) states that the applicant's discharge may not result in any new or substantially increased discharges of the pollutant to which the modification applies above the discharge specified in the Section 301(h) modified permit.

Effluent limits for BOD_5 and TSS are specified within the draft permit as follows:

Constituent	Monthly Average Limitations
BOD_5	203 mg/l (1,388 lbs/day)
TSS	145 mg/l (992 lbs/day)

The Eastport discharge will not result in any new or substantially increased discharge of these pollutants as the proposed limits are equal to the limits in the previous NPDES permitting action.

(2) 40 CFR 125.67(b) requires that, where pollutants discharges are attributable in part to combined sewer overflows, the applicant minimize existing overflows and prevent increases in the amount of pollutants discharged.

There are no CSO's associated with the Eastport collection system. Therefore, Eastport is in compliance with 40 CFR 125.67(b).

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

H. Special conditions for section 301(h) modified permits [40 CFR 125.68]

Each section 301(h) modified permit issued shall contain, in addition to all applicable terms and conditions required by 40 CFR part 122, the following:

(1) Effluent limits and mass loadings which will assure compliance with the requirements of this subpart (40 CFR 125.68(a)):

The draft NPDES permit contains such effluent limits and mass loadings.

(2) A schedule or schedules of compliance for (40 CFR 125.68(b)):

a. 40 CFR 125.68(b)(1), Pretreatment program development required by section 125.66(c).

The City of Eastport is not required to have a pretreatment program. Therefore, the permit does not contain a schedule for one.

b. 40 CFR 125.68(b)(2), Nonindustrial toxics control program required by section 125.66(d).

Given the nature of the source of the discharge Eastport has determined to the best of their knowledge, there are no sources of toxic pollutants being conveyed to the treatment plant. Therefore, 40 CFR 125.66(d) does not apply.

c. 40 CFR 125.68(b)(3), Control of combined sewer overflows required by section 125.67.

There are no CSO's associated with the Eastport collection system. Therefore Eastport is in compliance with 40 CFR 125.67.

3. Monitoring program requirements that include (40 CFR 125.68(c)):

a. 40 CFR 125.68(c)(1), Biological monitoring requirements of section 125.63(b).

See the discussion in Section V(1) of this document.

b. 40 CFR 125.68(c)(2), Water quality requirements of section 125.63(c).

See the discussion in Section V(1) of this document.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

c. 40 CFR 125.68(c)(3) Effluent monitoring requirements of sections 125.60(b), 125.62(c) and (d), and 125.63(d).

The draft NPDES permit contains appropriate effluent monitoring and reporting requirements to satisfy the above regulatory requirements.

4. Reporting requirements that include the results of the monitoring programs required by paragraph (c) of this section at such frequency as prescribed in the approved monitoring program (40 CFR 125.68(d)).

The draft NPDES permit contains monthly reporting of the results of effluent monitoring requirements specified by the permit.

VI. COMPLIANCE WITH PROVISIONS OF OTHER STATE, LOCAL OR FEDERAL LAWS

Pursuant to 40 CFR 125.59(b)(3), a modified NPDES permit may not be issued unless the proposed discharge complies with applicable provisions of state, local, or other federal laws or Executive Orders, including the Coastal Zone Management Act, 16 U.S.C. 1451 et seq., the Endangered Species Act, 16 U.S.C. 1531 et seq., and the Marine Protection, Research, and Sanctuaries Act 16 U.S.C. 1431 et seq. These requirements are discussed below.

A. State Coastal Zone Management Program

A copy of the draft NPDES permit is being sent to the Maine's State Planning Office for a consistency determination. With the expected Section 401 Water Quality Certification from the MEDEP, the EPA anticipates an affirmative consistency determination prior to issuance of the NPDES permit as a final agency action.

B. Endangered or Threatened Species

The United States Fish and Wildlife Service (USFWS) is responsible for making the determination that the Eastport discharge will not harm endangered or threatened species. The EPA will consult with USFWS on Endangered Species Act (ESA) requirements as the USFWS will be provided with a copy of 30-day formal draft permit.

The National Marine Fisheries Service (NMFS) is charged with implementing the ESA for marine species. EPA will consult with NMFS on ESA requirements at the same time as the Essential Fish Habitat consultation (see below).

VI. COMPLIANCE WITH PROVISIONS OF OTHER STATE, LOCAL OR FEDERAL LAWS

Both the USFWS and the NMFS agencies were provided with an opportunity to comment of the August 2002 NPDES permit. Neither agency object to the terms and conditions of the permit or recommended additional monitoring requirements. Being that discharge levels proposed in this draft permit are equivalent to the August 2002 levels, the EPA does not anticipate any objections to the proposed permitting action.

C. Marine Protection, Research and Sanctuaries Act

The discharge is not located near any marine or estuarine sanctuary designated under Title III of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended, or the Coastal Zone Management Act of 1972, as amended.

D. Essential Fish Habitat (EFH)

Under the 1996 Amendments (PL 104-297) 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 actions, or proposed actions that EPA 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, "... those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." 16 U.S.C. § 1802(10). Adverse effect 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.

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

As the federal agency charged with authorizing the discharge from this facility, EPA is in the process of consulting with the National Marine Fisheries Service (NMFS) under section 305 (b)(2) of the Magnuson-Stevens Act for essential fish habitat (EFH). This consultation will be completed before the permit is finalized.

VII. STATE CONCURRENCE IN VARIANCE

Permittees may not be granted a Section 301(h) variance, as specified under Section 301(h) of the Act and 40 CFR 125.59(i), until the appropriate State certification/concurrence is granted or waived pursuant to 40 CFR 124.54. A Section 301(h) waiver may not be granted if the State denies certification/ concurrence pursuant to 40 CFR 124.54. EPA expects that the State of Maine will make such a determination upon review of the proposed draft permit conditions.

VIII. CONCLUSION

The EPA has determined that Eastport's treated effluent, will receive enough initial dilution and mixing such that the discharge will comply with all of the requirements of Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987, and 40 CFR Part 125, Subpart G.

IX. TENTATIVE DECISION

For the reasons discussed in this tentative decision document, EPA is tentatively approving Eastport's request to discharge primary effluent into Passamaquoddy Bay. This tentative decision is contingent upon the following conditions:

1. The Eastport treatment system maintaining 30 % removal of BOD_5 and 50% removal TSS (Maine BPT and Section 401 Water Quality Certification condition) , and;

2. State certification is granted under Section 401 of the Act, and;

3. The discharge will comply with all state water-quality standards.

This tentative decision will become final upon issuance of the NPDES permit.