AUTHORIZATION TO DISCHARGE UNDER CLEAN WATER ACT SECTION 301 (h) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and Title 38 Maine Revised Statutes § 414-A et seq.,

City of Eastport
78 High Street
Eastport, Maine 04631

is authorized to discharge from a facility located at

County Road, Eastport, Maine 04631

to receiving water named **Passamaquoddy Bay**

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

This NPDES permit must become effective on the first day of the calendar month following 60 days after signature by both the Director of the United States Environmental Protection Agency (EPA or Region 1) and the Commissioner of the Maine Department of Environmental Protection (MEDEP or the Department). * This Waste Discharge License (WDL) shall become effective immediately upon signature by the Commissioner of the Maine Department of Environmental Protection.

Both the NPDES permit and WDL shall expire concurrently at midnight, five (5) years from the date of signature by the Commissioner of the Maine Department of Environmental Protection.

This permit supersedes the NPDES permit/WDL issued on March 21, 2019. This permit consists of the National Pollutant Discharge Elimination System Permit including effluent limitations and monitoring requirements (Part I) and MEPDES Standard Conditions Applicable to All Permits, (last revised July 1, 2002), EPA NPDES Part II Standard Conditions (April 26, 2018), Attachment A Effluent Mercury Test Report, Attachment B Whole Effluent Toxicity Report Marine Waters, and Attachment C WET and Chemical Specific Data Report Form.

Signed this ____day of _____

_____
Ken Moraff, Director
Water Division
Environmental Protection Agency
Boston, Massachusetts

Signed this ___day of _____

_____
Melanie Loyzim, Commissioner
Maine Department of Environmental Protection
Augusta, Maine

* Pursuant to 40 C.F.R. § 124.15(b)(3), if no comments requesting a change to the draft permit are received, the NPDES permit will become effective upon the date of signature by the Commissioner of the Maine DEP.

IN THE MATTER OF

CITY OF EASTPORT, WASHINGTON	)	NATIONAL POLLUTANT
COUNTY, MAINE	)	DISCHARGE ELIMINATION SYSTEM
PUBLICLY OWNED TREATMENT	)	
WORKS	)	WASTE DISCHARGE LICENSE
ME0100200	)	
W002598-6C-G-R	)	
APPROVAL	)	**RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 U.S.C., Section 1251, et seq., and 38 M.R.S., Section 414 A et seq., and applicable regulations, the U.S. Environmental Protection Agency (EPA or Region 1) and the Maine Department of Environmental Protection (MEDEP or the Department) have considered the application of the City Of Eastport (Eastport or Permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

Eastport has applied for renewal of a combined National Pollutant Discharge Elimination System (NPDES) permit #ME0100200 and Maine Waste Discharge License (WDL) # W002598-6C-G-R that was issued on March 21, 2019 and expired on March 20, 2024. The permit/license (permit) authorizes the discharge of up to a monthly average flow of 820,000 gallons per day (GPD) of primary treated sanitary wastewater to Passamaquoddy Bay, Class SC in Eastport, Maine.

PERMIT SUMMARY

This permitting action is <u>similar to</u> the previous permitting action in that it carries forward:

1. The monthly average flow limitation of 820,000 GPD.

2. The monthly average technology-based requirements to achieve a minimum of 30% removal of biochemical oxygen demand (BOD) and a minimum of 50% removal for total suspended solids (TSS).

3. The monthly average technology based mass limitations for BOD and TSS.

4. The daily maximum concentration reporting requirement for settleable solids.

5. The enterococci limits based on the state bacterial criteria to protect the recreational designated use.

6. The fecal coliform limits consistent with the recommendations in the 2023 National Shellfish Sanitation Program Guidelines and the year-round designated shellfishing use in Maine's water quality standards.

7. The total mercury limits consistent with Maine 06-096 Chapter 519: Interim Effluent Limitations and Controls for the Discharge of Mercury.

This permitting action is different than the previous permitting action in that it is:

1. Establishes a new monitoring requirement for aesthetics.

CONCLUSIONS

BASED on the findings in the Fact Sheet dated October 23, 2024 and subject to the Conditions listed below, the EPA and the Department make the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below its classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, 38 M.R.S. Section 464(4)(F), will be met, in that:

   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

   (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

   (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and

   (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the USEPA and the Department APPROVE the above-noted application of the CITY OF EASTPORT, MAINE WASTEWATER TREATMENT FACILITY, to discharge up to a monthly average of 820,000 gpd of primary treated waste waters to Passamaquoddy Bay, Class SC, in Eastport, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. "*Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*," revised July 1, 2002, and *EPA NPDES Part II, Standard Conditions,* (April 2018) copies attached.

2. The Conditions on the following pages.

3. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto shall remain in effect until a final decision on the renewal application becomes effective (See 40 C.F.R. § 122 6). [*Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR Ch. 2(21)(A) (amended June 9, 2018)].

Date of initial receipt of application: February 7, 2024
Date of application acceptance: February 8, 2024

Date filed with Maine Board of Environmental Protection _____
This order prepared by jointly GREGG WOOD, Bureau of Water Quality and MERIDITH FINEGAN, EPA Region 1.

PART I – EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. REGULATORY AUTHORITY

1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA or Region 1) pursuant to the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq.; and (ii) an identical state Waste Discharge License (WDL) issued by the Commissioner of the Maine Department of Environmental Protection (MEDEP or the Department) pursuant to the Maine law, 38 M.R.S., Section 414-A et seq., and applicable regulations. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 C.M.R. 3.19, are hereby incorporated by reference into this surface water discharge permit/license (permit).

2. This authorization also incorporates the state water quality certification issued by MEDEP under § 401(a) of the Federal Clean Water Act, 40 C.F.R. § 124.53, M.G.L. c. 21, § 27. All of the requirements (if any) contained in MEDEP's water quality certification for the permit are hereby incorporated by reference into this state permit.

3. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit/license as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal, or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit/license is declared invalid, illegal, or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a WDL issued by the State of Maine.

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through expiration, the permittee is authorized to discharge primary treated effluent from outfall serial number 001A to Passamaquoddy Bay. Such discharge must be limited and monitored as specified below.

Effluent Characteristic	**Discharge Limitations**				**Monitoring Requirement**	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	820,000 gpd *[07]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD *[00310]*	1,388 lbs/day *[26]*	Report lbs/day *[26]*	203 mg/L*[19]*	Report, mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD % Removal (1) *[50076]*	---	---	30 % *[23]*	---	1/Month *[01/30]*	Calculate*[CA]*
TSS *[00530]*	992 lbs/day *[26]*	Report lbs/day *[26]*	145 mg/L *[19]*	Report, mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS % Removal (1) *[81011]*	---	---	50 % *[23]*	---	1/Month *[01/30]*	Calculate*[CA]*
Settleable Solids *[00545]*	---	---	Report (mg/L) *[25]*	Report (mg/L)*[25]*	1/Week *[01/07]*	Grab *[GR]*
Fecal Coliform Bacteria (2) *[31615]* Year-round	---	---	14 cfu/100 mL *[30]*	31 cfu/100 mL *[30]*	1/Week *[01/07]*	Grab *[GR]*
Enterococci bacteria (2,4) *[61211]* (April 15 – October 31 each year)	---	---	14 cfu/100 mL *[30]*	94 cfu/100 mL *[30]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine (3,4) *[50060]*	---	---	0.18 mg/L *[19]*	1.0 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
Total Mercury (4,5) [71900]	---	---	236.9 ng/L	355.4 ng/L	1/Year *[01/YR]*	Grab*[GR]*
pH (Std. Units) *[00400]*	The pH shall not be less than 6.0 or greater than 9.0 at any time.				1/Week *[01/01]*	Grab *[GR]*

The italicized numeric values bracketed in the table above are code numbers that Department personnel use to code the monthly Discharge Monitoring Reports (DMR's).

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Continued

Screening Level Testing - Beginning 24 months prior to the expiration date of this permit and lasting through 12 months prior to the expiration date of the permit.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (6) Acute – NOEL *Mysidopsis bahia* [TDM3E] *(Mysid Shrimp)*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* *[TBH3A]* *(Sea urchin)*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Priority pollutant (7,9) *[50008]*	---	---	---	Report µg/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24]*
Analytical chemistry (8,9) *[50008]*	---	---	---	Report µg/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24]*
Aesthetics (10)	---	---	---	Report	1/Month	Observation

The italicized numeric values in brackets in the tables above are not limitations but codes used by Department personnel to code monthly Discharge Monitoring Reports (DMRs).

Footnotes:

1. Percent removal - The permittee shall achieve at least 30% removal for BOD and 50% removal for TSS. For the purposes of calculating a monthly average percent removal, the permittee shall use the measured monthly average influent and effluent concentrations. The permittee shall report the measured influent concentrations.

   Calculating BOD_5 Monthly Average Percent Removal

   $$\frac{(Z \text{ mg/L} - X \text{ mg/L}) * (100\%)}{(Z \text{ mg/L})} = Y \% \text{ Removal}$$

   Where,
   Z = Monthly Average influent BOD_5 Concentration in mg/L,
   X = Monthly Average effluent BOD_5 concentration in mg/L and
   Y = Actual Monthly Average BOD_5 Percent Removal

   Calculating TSS Monthly Average Percent Removal

   $$\frac{(Z \text{ mg/L} - X \text{ mg/L}) * (100\%)}{(Z \text{ mg/L})} = Y \% \text{ Removal}$$

   Where,
   Z = Monthly Average influent TSS Concentration in mg/L,
   X = Monthly Average effluent TSS concentration in mg/L and,
   Y = Actual Monthly Average TSS Percent Removal.

2. Fecal coliform and enterococci bacteria – The monthly average limits for fecal coliform and enterococci are expressed as and must be reported as a geometric mean. Enterococci bacteria limitations and monitoring requirements are in effect between April 15th – October 31st of each year. The EPA and Department reserves the right to impose the enterococci limitations on a year-round basis to protect the health, safety and welfare of the public.

3. Total residual chlorine (TRC) – Limitations and monitoring requirements for TRC are in effect whenever elemental chlorine or chlorine-based compounds are utilized for disinfection or cleaning. The permittee shall utilize approved test methods that are capable of bracketing the limitations in this permit.

4. Required for State Certification.

5. Mercury – All mercury sampling (1/Year) required to determine compliance with interim limitations established pursuant to Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 CMR 519 (last amended October 6, 2001) shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method

1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses shall be conducted in accordance with EPA Method 1631E, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See Attachment A, Effluent Mercury Test Report, of this permit for the Department's form for reporting mercury test results. Compliance with the monthly average will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

6. **Whole Effluent Toxicity (WET) Testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 7.1% and 0.29%, respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points.

    - **Surveillance level testing** – Pursuant to Department rule 06-096 CMR., Chapter 530(2)(D)(3)(d), surveillance level testing is being waived.

    - **Screening level testing** - Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration and every five years thereafter, the permittee must conduct screening level WET testing at a minimum frequency of once per year using the mysid shrimp and sea urchin.

    Test results must be submitted to both the Department and EPA not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 7.1% and 0.29%, respectively.

    Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following USEPA methods manuals.

    - U.S. Environmental Protection Agency. 2002. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organism*s, 5th ed. EPA 821-R-02-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the acute method manual)

    - U.S. Environmental Protection Agency. 2002. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organism*s, 3rd ed. EPA 821-R-02-014. U.S. Environmental Protection Agency,

Office of Water, Washington, D.C., October 2002 (the marine chronic method manual)

Results of WET tests must be reported on the "Whole Effluent Toxicity Report Marine Waters" form included as Attachment B of this permit each time a WET test is performed. The Permittee is required to analyze the effluent for the analytical chemistry parameters specified on the "WET and Chemical Specific Data Report Form" form included as Attachment C of this permit each time a WET test is performed.

7. **Priority Pollutant Testing –** Refers to a suite of chemical tests in Attachment C of this permit.

   a. **Surveillance level testing** – Not required by Department rule 06-096 CMR., Chapter 530.

   b. **Screening level testing** – Beginning 24 months prior to the expiration date of the permit and lasting through 12 months prior to permit expiration and every five years thereafter, the permittee must conduct priority pollutant testing at a minimum frequency of once per year.

8. **Analytical Chemistry** – Refers to a suite of chemical tests in Attachment C of this permit.

   a. **Surveillance level testing** - Pursuant to Department rule 06-096 CMR., Chapter 530(2)(D)(3)(d), surveillance level testing is being waived.

   b. **Screening level testing** – Beginning 24 months prior to the expiration of the permit and lasting through 12 months prior to permit expiration and every five years thereafter, the permittee must conduct analytical chemistry testing at a minimum frequency of once per calendar quarter for four consecutive calendar quarters.

9. **Analytical chemistry and priority pollutant testing** - Tests must be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, when applicable. Analysis must be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve the most current minimum reporting levels (RL) of detection as specified by the Department, unless a lower detection level is required to be consistent with the sufficiently sensitive methods requirements found in Part I.B.2 (second paragraph) of this permit. See Attachment C of this permit for a list of the Department's most current RLs.

   Analytical chemistry and priority pollutant test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the laboratory reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible

exceedances of the acute, chronic or human health AWQC as established in Chapter 584. For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" for monitoring not required this period.

10. Once per month, the Permittee shall conduct a visual inspection of the receiving water in the vicinity of the outfall and report any changes that may be caused by the discharge as follows:

    a) any visible change in color,
    b) any visible change in turbidity,
    c) the presence or absence of any visible foam or floating solids,
    d) the presence or absence of any visible oil sheen on the surface of the water.

    The Permittee shall also report any complaints it receives from the public regarding the taste and/or odor of the receiving water and document what remedial actions, if any, it took to address such complaints.

    The results do not need to be submitted each month. Rather, an annual summary of all 12 monthly results shall be submitted as an electronic attachment to the December DMR by each January 15th for the previous calendar year.

2. Sampling

Sampling for all parameters must be collected after the last treatment process prior to discharge to the receiving water. Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (C.F.R.) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 C.F.R. Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to Waste Discharge Licenses 38 M.R.S. § 413 are subject to the provisions and restrictions of Maine Comprehensive and Limited Environmental Laboratory Certification Rules, 10-144 CMR 263 (last amended March 15, 2023). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 C.F.R. Part 136 or as specified in this permit, all results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the permittee must monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the analysis of pollutants or pollutant parameters limited except WET). A method is considered "sufficiently sensitive" when: (1) The method minimum level (ML) is at or below the level of the effluent limit established in this permit for the measured pollutant or pollutant parameter; or (2) The method has the lowest

ML of the analytical methods approved under 40 C.F.R. Part 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter.

The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor. When a parameter is not detected above the ML, the permittee must report the data qualifier signifying less than the ML for that parameter (e.g., <50µg/L, if the ML for a parameter is 50 µg/L).

In calculating and reporting the average monthly concentration when the pollutant is not detected, assign zero to the non-detected sample result if the pollutant was not detected for all monitoring periods in the prior twelve months. If the pollutant was detected in at least one monitoring period in the prior twelve months, then assign each non-detected sample result a value that is equal to one half of the detection limit for the purposes of calculating averages.

C. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent must not contain materials that cause a visible oil sheen, foam or floating solids in the receiving waters.

2. The discharge must not cause a change in color, taste, or turbidity in the receiving waters.

D. TREATMENT PLANT OPERATOR (specific to MEDEP)

The treatment facility must be operated by a person holding a minimum of a **Grade II** certificate or higher (or Registered Maine Professional Engineer) pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S.A., Sections 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 C.M.R. Ch. 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from the outfall(s) listed in Part 1.B.1. Discharges of wastewater from any other point sources, including sanitary sewer overflows (SSOs) are not authorized under this permit, and must be reported in accordance with Part D.1.e of the Standard Conditions of this permit.

Any pollutant loading greater than the proposed discharge (based on the chemical-specific data and the facility's design flow as described in the permit application, or any other information provided to EPA during the permitting process) is not authorized by this permit.

Discharges from emergency bypass structures in pump stations are not authorized by this permit. The permittee shall make provisions to monitor the pump stations listed below, in accordance with a monitoring plan reviewed and approved by the Department, to determine the frequency and quantity (via measurement or estimation) of wastewater discharged from the bypass structures. Discharges from the following pump stations shall be reported in accordance with Standard Condition B(5), *Bypasses,* and Special Condition E, *Authorized Discharges,* of this permit.

Outfall#	Location	Receiving Water & Classification
002	Middle Street, Pump Station	Passamaquoddy Bay, Class SC
003	Water Street, Pump Station	Passamaquoddy Bay, Class SC

F. NOTIFICATION REQUIREMENT

In accordance with EPA Part II Standard Condition D, the permittee must notify the Department and the EPA of the following:

1. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.

2. For the purposes of this section, adequate notice must include information on:

    a. The quality or quantity of waste water introduced to the waste water collection and treatment system;

    b. Any anticipated impact of the change in the quality or quantity of the waste water to be discharged from the treatment system and

    c. Prohibitions concerning interference and pass-through: pollutants introduced into POTW's by a non-domestic source (user) shall not pass through the POTW or interfere with the operation or performance of the works.

G. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff must maintain a current written Wet Weather Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall.

The plan must include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

The permittee must review their plan annually and record necessary changes to keep the plan up to date.

H. OPERATIONS AND MAINTENANCE FOR THE TREATMENT PLANT

This facility must maintain a current written comprehensive Operation & Maintenance (O&M) Plan. The plan must provide a systematic approach by which the permittee must at all times properly 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 this permit.

By December 31 of each year and within 90 days of any process changes or minor equipment upgrades *[PCS Code 09699],* the permittee must evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the waste water treatment facility to ensure that it is up to date. The O&M Plan must be kept on-site at all times and made available to Department and EPA personnel upon request.

Within 90 days of completion of new and or substantial upgrades of the wastewater PCS Codes treatment facility *[PCS Code 50108],* the permittee must submit the updated O&M Plan to their Department's compliance inspector for review and comment.

Within ninety (90) days of the effective date of this permit, *[PCS Code 00701]*, the permittee must submit to the Maine Department of Environmental Protection for review and approval, a public education program designed to minimize the entrance of non-industrial toxic pollutants and pesticides into the collection system and waste water treatment facility.

Within one hundred and twenty (120) days of the effective date of this permit, *[PCS Code 53399]*, the permittee must provide written notice to the Maine Department of Environmental Protection, that the approved public education program has been implemented.

I. OPERATION AND MAINTENANCE OF THE TREATMENT AND CONTROL FACILITIES

1. Adaptation Planning

a. *Adaptation Plan*. Within the timeframes described below, the Permittee shall develop an Adaptation Plan for the Wastewater Treatment System (WWTS) [1] and/or sewer system[2] that they own and operate. Additional information on the procedures and resources to aid permittees in development of the Adaptation Plan is provided on EPA's Region 1 NPDES website at https://www.epa.gov/npdes-permits/npdes-water-permit-program-new-england. The Adaptation Plan shall contain sufficient detail for EPA to evaluate the analyses.

Component 1: Identification of Vulnerable Critical Assets. Within 24 months of the effective date of the permit, the Permittee shall develop and sign, consistent with the signatory requirements in Part II.D.2 of this Permit, an identification of critical assets[3] and related operations[4] within the WWTS and/or sewer system which they own and operate, as applicable, that are most vulnerable due to major storm and flood events[5] under baseline conditions[6] and under future conditions.[7] This information shall be provided to EPA upon request. For these critical assets and related operations, the Permittee shall assess the ability of each to function properly in the event of impacts[8] from major storm and flood events in terms of effluent flow

1 "Wastewater Treatment System" or "WWTS" means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It does not include sewers, pipes and other conveyances to the wastewater treatment facility.
2 "Sewer System" refers to the sewers, pump stations, manholes and other infrastructure use to convey sewage to the wastewater treatment facility from homes or other sources.
3 A "critical asset" is an asset necessary to ensure the safe and continued operation of the WWTS or the sewer system and ensure the forward flow and treatment of wastewater in accordance with the limits set forth in this permit.
4 "Asset related operations" are elements of an asset that enable that asset to function. For example, pumps and power supply enable the operation of a pump station.
5 "Major storm and flood events" refer to instances resulting from major storms such as hurricanes, extreme/heavy precipitation events, and pluvial, fluvial, and flash flood events such as high-water events, storm surge, and high-tide flooding, including flooding caused by sea level change. "Extreme/heavy precipitation" refers to instances during which the amount of rain or snow experienced in a location substantially exceeds what is normal according to location and season.
6 "Baseline conditions" refers to the 100-year flood based on historical records.
7 "Future conditions" refers to projected flood elevations using one of two approaches: a) Climate Informed Science Approach (CISA): The elevation and flood hazard area that result from using the best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science. These shall include both short term (10-25 years forward-looking) and long term (25-70 years forward-looking) relative to the baseline conditions and must include projections of flooding due to major storm and flood events using federal, state and local data, where available; b) Freeboard Value and 500-year floodplain Approach: The flood elevations that result from adding an additional 2 feet to the 100-year flood elevation for non-critical actions and by adding an additional 3 feet to the 100-year flood elevation for critical actions compared to the flood elevations that result from 500-year flood (the 0.2% -annual-chance flood) and selecting the higher of the two flood elevations.
8 "Impacts" refers to a strong effect on an asset and/or asset-related operation that may include destruction, damage or ineffective operation of the asset and/or asset operation. Impacts may be economic, environmental, or public health related.

(e.g., bypass, upset or failure), sewer flow (e.g., overflow, inflow and infiltration), and discharges of pollutants (e.g., effluent limit exceedance).

Component 2: Adaptive Measures Assessment.[9] Within 36 months of the effective date of the permit, the Permittee shall develop and sign, consistent with the signatory requirements in Part II.D.2 of this Permit, an assessment of adaptive measures,[10] and/or, if appropriate, the combinations of adaptive measures that minimize the impact of future conditions on the critical assets and related operations of the WWTS and/or sewer system(s). This information shall be provided to EPA upon request. The Permittee shall identify the critical assets and related operations at the highest risk of not functioning properly under such conditions and, for those, select the most effective adaptation measures that will ensure proper operation of the highest risk critical assets and the system as a whole.

C*omponent 3: Implementation and Maintenance Schedule.* Within 48 months of the effective date of the permit, the Permittee shall submit to EPA a proposed schedule for implementation and maintenance of adaptive measures. The Implementation and Maintenance Schedule shall summarize the general types of significant risks[11] identified in Component 1, including the methodology and data used to derive future conditions[12] used in the analysis and describe the adaptive measures taken (or planned) to minimize those risks from the impact of major storm and flood events for each of the critical assets and related operations of the WWTS and the sewer system and how those adaptive measures will be maintained, including the rationale for either implementing or not implementing each adaptive measure that was assessed and an evaluation of how each adaptive measure taken (or planned) will be funded.

b. *Credit for Prior Assessment(s) Completed by Permittee.* If the Permittee has undertaken assessment(s) that were completed within 5 years of the effective date of this permit, or is [are] currently undertaking an assessment that address some or all of the Adaptation Plan components, such prior assessment(s) undertaken by the Permittee may be used (as long as the reporting time frames (set forth in Part I.I.1.a)

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9 The Permittee may complete this component using EPA's Climate Resilience Evaluation and Awareness Tool (CREAT) Risk Assessment Application for Water Utilities, found on EPA's website Creating Resilient Water Utilities (CRWU) (https://www.epa.gov/crwu), or methodology that provides comparable analysis.

10 "Adaptive Measures" refers to physical infrastructure or actions and strategies that a utility can use to protect their assets and mitigate the impacts of threats. They may include but are not limited to: building or modifying infrastructure, utilization of models (including but not limited to: flood, sea-level rise and storm surge, sewer/collection system, system performance), monitoring and inspecting (including but not limited to: flood control, infrastructure, treatment) and repair/retrofit.

11 In light of security concerns posed by the public release of information regarding vulnerabilities to wastewater infrastructure, the Permittee shall provide information only at a level of generality that indicates the overall nature of the vulnerability but omitting specific information regarding such vulnerability that could pose a security risk.

12 See footnote 7.

and the signatory requirements (set forth in Part II.D.2 of this permit) are met) in satisfaction of some or all of these components, as long as the Permittee explains how its prior assessments specifically meet the requirements set forth in this permit and how the Permittee will address any permit requirements that have not been addressed in its prior or ongoing assessment(s).

c. *Adaptation Plan Progress Report*. The Permittee shall submit an Adaptation Plan Progress Report on the Adaptation Plan for the prior calendar year that documents progress made toward completing the Adaptation Plan and, following its completion, any progress made toward implementation of adaptive measures, and any changes to the WWTF or other assets that may impact the current risk assessment. The first Adaptation Progress Report is due the first March 31 following completion of the Identification of Critical Vulnerable Assets (*Component 1*) and shall be submitted by March 31 each year thereafter. The Adaptation Plan shall be revised if on- or off-site structures are added, removed, or otherwise significantly changed in any way that will impact the vulnerability of the WWTS or sewer system.

2. Sewer System

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

a. Maintenance Staff

The Permittee must provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit. Provisions to meet this requirement must be described in the O&M Plan required in Section H, above.

b. Preventive Maintenance Program

The Permittee must maintain an ongoing preventive maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program must include an inspection program designed to identify all potential and actual unauthorized discharges. Provisions to meet this requirement must be described in the O&M Plan required in Section H, above.

c. Infiltration/Inflow

The Permittee must control infiltration and inflow (I/I) into the sewer system as necessary to prevent high flow related unauthorized discharges from their collection system and high flow related violations of the wastewater treatment plant's effluent limitations, or excessive I/I.

d. Collection System Mapping

The Permittee must maintain a map of the sewer collection system it owns.

The map must be on a street map of the community, with sufficient detail and at a scale to allow easy interpretation. The collection system information shown on the map must be based on current conditions and shall be kept up-to-date and available for review by federal, state, or local agencies. Such map(s) must include, but not be limited to the following:

1. All sanitary sewer lines and related manholes;
2. All pump stations and force mains;
3. All surface waters (labeled);
4. Other major appurtenances such as inverted siphons and air release valves;
5. A numbering system which uniquely identifies manholes, catch basins, overflow points, regulators and outfalls; and
6. The scale and a north arrow; and the pipe diameter, date of installation, type of material, distance between manholes and the direction of flow.

J. 06-096 C.M.R. Ch. 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING (Specific to Maine DEP)

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[PCS Code 95799]***.

1. Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;

2. Changes in the operation of the treatment works that may increase the toxicity of the discharge; and

3. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.

4. In addition, in the comments section of the certification form, the permittee must provide the Department with statements describing;

   a. Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.

   b. Increases in the type or volume of hauled wastes accepted by the facility.

5. The Department reserves the right to require annual (surveillance level) testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause exceedances of ambient water quality criteria/thresholds.

K. SLUDGE AND/OR SEPTAGE USE/DISPOSAL

1. The permittee must comply with all existing federal and state laws and regulations that apply to sludge and/or septage use and disposal practices, including EPA regulations promulgated at 40 C.F.R. Part 503.

2. If both state and federal requirements apply to the permittee's septage use and/or disposal practices, the permittee must comply with the more stringent of the applicable requirements.

L. MONITORING AND REPORTING

Electronic Reporting: NPDES Electronic Reporting, 40 C.F.R. § 127, requires Maine NPDES permit holders to submit monitoring results obtained during the previous month on an electronic discharge monitoring report to the regulatory agency utilizing the USEPA electronic system.

1. Electronic DMRs submitted using the USEPA CDX system, must be:

   a. Submitted by a facility-authorized signatory; and

   b. Submitted no later than midnight on the 15th day of the month following the completed reporting period.

2. Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP Toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email.

3. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your CDX submittal will suffice. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

4. Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, must be made to EPA. This includes verbal reports and notifications which require reporting within 24 hours. (As examples, see EPA Standard Conditions, Part II.B.4.c. (2), Part II.B.5.c. (3), and Part II.D.1.e.) Verbal reports and verbal notifications shall be made to EPA at:

U.S. Environmental Protection Agency
Enforcement and Compliance Assurance Division
617-918-1746

M. RE-OPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of test results required by Part I of this permitting action, additional site-specific information or any other pertinent information or test result obtained during the term of this permit, the Department may, at any time, and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded; (2) require additional monitoring if results on file are inconclusive; or (3) change the monitoring requirements and/or limitations based on new information.

CONTENTS

A. GENERAL PROVISIONS

1. **General compliance**. All discharges shall be consistent with the terms and conditions of this permit; any changes in production capacity or process modifications which result in changes in the quantity or the characteristics of the discharge must be authorized by an additional license or by modifications of this permit; it shall be a violation of the terms and conditions of this permit to discharge any pollutant not identified and authorized herein or to discharge in excess of the rates or quantities authorized herein or to violate any other conditions of this permit.

2. Other materials. Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

(a) They are not

(i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
(ii) Known to be hazardous or toxic by the licensee.

(b) The discharge of such materials will not violate applicable water quality standards.

3. Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of State law and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

(a) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act, and 38 MRSA, §420 or Chapter 530.5 for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
(b) Any person who violates any provision of the laws administered by the Department, including without limitation, a violation of the terms of any order, rule license, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

4. Duty to provide information. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

5. Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. Reopener clause. The Department reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedule of compliance or other provisions which may be authorized under 38 MRSA, §414-A(5).

7. Oil and hazardous substances. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.

8. Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Confidentiality of records. 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."

10. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

11. Other laws. The issuance of this permit does not authorize any injury to persons or property or invasion of other property rights, nor does it relieve the permittee if its obligation to comply with other applicable Federal, State or local laws and regulations.

12. Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
(d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

(a) The permittee shall collect all waste flows designated by the Department as requiring treatment and discharge them into an approved waste treatment facility in such a manner as to

maximize removal of pollutants unless authorization to the contrary is obtained from the Department.

(b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.

(c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.

(d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.

(e) The permittee shall install flow measuring facilities of a design approved by the Department.

(f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

2. Proper operation and maintenance. The permittee shall at all times properly 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 this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Bypasses.

(a) Definitions.

(i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

(c) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).

(d) Prohibition of bypass.

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(C) The permittee submitted notices as required under paragraph (c) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;
(ii) The permitted facility was at the time being properly operated; and
(iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
(iv) The permittee complied with any remedial measures required under paragraph B(4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

C. MONITORING AND RECORDS

1. General Requirements. This permit shall be subject to such monitoring requirements as may be reasonably required by the Department including the installation, use and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). The permittee shall provide the Department with periodic reports on the proper Department reporting form of monitoring results obtained pursuant to the monitoring requirements contained herein.

2. Representative sampling. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. If effluent limitations are based wholly or partially on quantities of a product processed, the permittee shall ensure samples are representative of times when production is taking place. Where discharge monitoring is required when production is less than 50%, the resulting data shall be reported as a daily measurement but not included in computation of averages, unless specifically authorized by the Department.

3. Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(c) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date(s) analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.

(e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

D. REPORTING REQUIREMENTS

1. Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
(B) Any upset which exceeds any effluent limitation in the permit.
(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

(iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (f)(ii) of this section if the oral report has been received within 24 hours.

(g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.

(h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

2. Signatory requirement. All applications, reports, or information submitted to the Department shall be signed and certified as required by Chapter 521, Section 5 of the Department's rules. State law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained by any order, rule, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

3. Availability of reports. Except for data determined to be confidential under A(9), above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by State law, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal sanctions as provided by law.

4. Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under this Section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

(a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(i) One hundred micrograms per liter (100 ug/l);
(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

(b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following ``notification levels'':

(i) Five hundred micrograms per liter (500 ug/l);
(ii) One milligram per liter (1 mg/l) for antimony;
(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

(a) All POTWs must provide adequate notice to the Department of the following:

(i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
(ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
(iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

1. Emergency action - power failure. Within thirty days after the effective date of this permit, the permittee shall notify the Department of facilities and plans to be used in the event the primary source of power to its wastewater pumping and treatment facilities fails as follows.

(a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.

(b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

2. Spill prevention. (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminates and shall specify means of disposal and or treatment to be used.

3. **Removed substances.** Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.

4. **Connection to municipal sewer.** (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.

F. DEFINITIONS. For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

Average means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For bacteria, the average shall be the geometric mean.

Average monthly discharge limitation means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. Except, however, bacteriological tests may be calculated as a geometric mean.

Average weekly discharge limitation means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best management practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Composite sample means a sample consisting of a minimum of eight grab samples collected at equal intervals during a 24 hour period (or a lesser period as specified in the section on monitoring and reporting) and combined proportional to the flow over that same time period.

Continuous discharge means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

Daily discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by approved States as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Flow weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab sample means an individual sample collected in a period of less than 15 minutes.

Interference means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

(1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
(2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum daily discharge limitation means the highest allowable daily discharge.

New source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or
(b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

Pass through means a discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR parts 122, 123 and 124. Permit includes an NPDES general permit (Chapter 529). Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

Person means an individual, firm, corporation, municipality, quasi-municipal corporation, state agency, federal agency or other legal entity.

Point source means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant means dredged spoil, solid waste, junk, incinerator residue, sewage, refuse, effluent, garbage, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or byproducts, heat, wrecked or discarded equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly owned treatment works ("POTW") means any facility for the treatment of pollutants owned by the State or any political subdivision thereof, any municipality, district, quasi-municipal corporation or other public entity.

Septage means, for the purposes of this permit, any waste, refuse, effluent sludge or other material removed from a septic tank, cesspool, vault privy or similar source which concentrates wastes or to which chemicals have been added. Septage does not include wastes from a holding tank.

Time weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected over a constant time interval.

Toxic pollutant includes any pollutant listed as toxic under section 307(a)(1) or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA. Toxic pollutant also includes those substances or combination of substances, including disease causing agents, which after discharge or upon exposure, ingestion, inhalation or assimilation into any organism, including humans either directly through the environment or indirectly through ingestion through food chains, will, on the basis of information available to the board either alone or in combination with other substances already in the receiving waters or the discharge, cause death, disease, abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in such organism or their offspring.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole effluent toxicity means the aggregate toxic effect of an effluent measured directly by a toxicity test.

NPDES PART II STANDARD CONDITIONS
(April 26, 2018)[1]

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[1] Updated July 17, 2018 to fix typographical errors.

A. GENERAL REQUIREMENTS

1. Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA or Act) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

a. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

b. Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (83 Fed. Reg. 1190-1194 (January 10, 2018) and the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note. See Pub. L.114-74, Section 701 (Nov. 2, 2015)). These requirements help ensure that EPA penalties keep pace with inflation. Under the above-cited 2015 amendments to inflationary adjustment law, EPA must review its statutory civil penalties each year and adjust them as necessary.

(1) Criminal Penalties

(a) *Negligent Violations.* The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less than $2,500 nor more than $25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation or by imprisonment of not more than 2 years, or both.

(b) *Knowing Violations.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

(c) *Knowing Endangerment.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he or she is placing another person in imminent danger of death or serious bodily injury shall upon conviction be subject to a fine of not more than $250,000 or by imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing

endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

(d) *False Statement.* The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

(2) *Civil Penalties*. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. *See* Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).

(3) *Administrative Penalties*. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty as follows:

(a) *Class I Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. *See* Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).

(b) *Class II Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. *See* Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).

2. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit

condition.

3. Duty to Provide Information

The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

4. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from responsibilities, liabilities or penalties to which the Permittee is or may be subject under Section 311 of the CWA, or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

5. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

6. Confidentiality of Information

a. In accordance with 40 C.F.R. Part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 C.F.R. Part 2 (Public Information).

b. Claims of confidentiality for the following information will be denied:

(1) The name and address of any permit applicant or Permittee;
(2) Permit applications, permits, and effluent data.

c. Information required by NPDES application forms provided by the Director under 40 C.F.R. § 122.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

7. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit. The Permittee shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

8. State Authorities

Nothing in Parts 122, 123, or 124 precludes more stringent State regulation of any activity

covered by the regulations in 40 C.F.R. Parts 122, 123, and 124, whether or not under an approved State program.

9. Other Laws

The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The Permittee shall at all times properly 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 this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. Bypass

a. Definitions

(1) *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.

(2) *Severe property damage* means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. *Bypass not exceeding limitations.* The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this Section.

c. Notice

(1) *Anticipated bypass*. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass. As of December 21, 2020 all notices submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.

(2) *Unanticipated bypass*. The Permittee shall submit notice of an unanticipated bypass as required in paragraph D.1.e. of this part (24-hour notice). As of December 21, 2020 all notices submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or required to do so by law.

d. *Prohibition of bypass.*

(1) Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and

(c) The Permittee submitted notices as required under paragraph 4.c of this Section.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 4.d of this Section.

5. Upset

a. *Definition*. *Upset* means an exceptional incident in which there is an unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or

improper operation.

b. *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph B.5.c. of this Section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. *Conditions necessary for a demonstration of upset.* A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the Permittee can identify the cause(s) of the upset;
(2) The permitted facility was at the time being properly operated; and
(3) The Permittee submitted notice of the upset as required in paragraph D.1.e.2.b. (24-hour notice).
(4) The Permittee complied with any remedial measures required under B.3. above.

d. *Burden of proof.* In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

C. MONITORING REQUIREMENTS

1. Monitoring and Records

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

b. Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least 5 years (or longer as required by 40 C.F.R. § 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

c. Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;
(2) The individual(s) who performed the sampling or measurements;
(3) The date(s) analyses were performed;
(4) The individual(s) who performed the analyses;
(5) The analytical techniques or methods used; and
(6) The results of such analyses.

d. Monitoring must be conducted according to test procedures approved under 40 C.F.R. § 136 unless another method is required under 40 C.F.R. Subchapters N or O.

e. The Clean Water Act provides that any person who falsifies, tampers with, or

knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

2. Inspection and Entry

The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

D. REPORTING REQUIREMENTS

1. Reporting Requirements

a. *Planned Changes*. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. § 122.29(b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements at 40 C.F.R. § 122.42(a)(1).

(3) The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

b. *Anticipated noncompliance*. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c. *Transfers.* This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Clean Water Act. *See* 40 C.F.R. § 122.61; in some cases, modification or revocation and reissuance is mandatory.

d. *Monitoring reports*. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016 all reports and forms submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or if required to do so by State law.

(2) If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 C.F.R. § 136, or another method required for an industry-specific waste stream under 40 C.F.R. Subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

(3) Calculations for all limitations which require averaging or measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

e. *Twenty-four hour reporting.*

(1) The Permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written report shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all

reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require Permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section.

(2) The following shall be included as information which must be reported within 24 hours under this paragraph.

(a) Any unanticipated bypass which exceeds any effluent limitation in the permit. *See* 40 C.F.R. § 122.41(g).
(b) Any upset which exceeds any effluent limitation in the permit.
(c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. *See* 40 C.F.R. § 122.44(g).

(3) The Director may waive the written report on a case-by-case basis for reports under paragraph D.1.e. of this Section if the oral report has been received within 24 hours.

f. *Compliance Schedules.* Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

g. *Other noncompliance.* The Permittee shall report all instances of noncompliance not reported under paragraphs D.1.d., D.1.e., and D.1.f. of this Section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph D.1.e. of this Section. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in paragraph D.1.e. and the applicable required data in Appendix A to 40 C.F.R. Part 127. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), §122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require Permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this Section.

h. *Other information.* Where the Permittee becomes aware that it failed to submit any

relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

i. *Identification of the initial recipient for NPDES electronic reporting data*. The owner, operator, or the duly authorized representative of an NPDES-regulated entity is required to electronically submit the required NPDES information (as specified in Appendix A to 40 C.F.R. Part 127) to the appropriate initial recipient, as determined by EPA, and as defined in 40 C.F.R. § 127.2(b). EPA will identify and publish the list of initial recipients on its Web site and in the FEDERAL REGISTER, by state and by NPDES data group (see 40 C.F.R. § 127.2(c) of this Chapter). EPA will update and maintain this listing.

2. Signatory Requirement

a. All applications, reports, or information submitted to the Director shall be signed and certified. *See* 40 C.F.R. §122.22.

b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

3. Availability of Reports.

Except for data determined to be confidential under paragraph A.6. above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Director. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statements on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA.

E. DEFINITIONS AND ABBREVIATIONS

1. General Definitions

For more definitions related to sludge use and disposal requirements, see EPA Region 1's NPDES Permit Sludge Compliance Guidance document (4 November 1999, modified to add regulatory definitions, April 2018).

Administrator means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

Applicable standards and limitations means all, State, interstate, and federal standards and limitations to which a "discharge," a "sewage sludge use or disposal practice," or a related activity is subject under the CWA, including "effluent limitations," water quality standards, standards of performance, toxic effluent standards or prohibitions, "best management practices," pretreatment standards, and "standards for sewage sludge use or disposal" under Sections 301, 302, 303, 304, 306, 307, 308, 403 and 405 of the CWA.

Application means the EPA standard national forms for applying for a permit, including any additions, revisions, or modifications to the forms; or forms approved by EPA for use in

"approved States," including any approved modifications or revisions.

Approved program or *approved State* means a State or interstate program which has been approved or authorized by EPA under Part 123.

Average monthly discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

Average weekly discharge limitation means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

Best Management Practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Bypass see B.4.a.1 above.

C-NOEC or *"Chronic (Long-term Exposure Test) – No Observed Effect Concentration" means* the highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specified time of observation.

Class I sludge management facility is any publicly owned treatment works (POTW), as defined in 40 C.F.R. § 501.2, required to have an approved pretreatment program under 40 C.F.R. § 403.8 (a) (including any POTW located in a State that has elected to assume local program responsibilities pursuant to 40 C.F.R. § 403.10 (e)) and any treatment works treating domestic sewage, as defined in 40 C.F.R. § 122.2, classified as a Class I sludge management facility by the EPA Regional Administrator, or, in the case of approved State programs, the Regional Administrator in conjunction with the State Director, because of the potential for its sewage sludge use or disposal practice to affect public health and the environment adversely.

Contiguous zone means the entire zone established by the United States under Article 24 of the Convention on the Territorial Sea and the Contiguous Zone.

Continuous discharge means a "discharge" which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or similar activities.

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483and Public Law 97-117, 33 U.S.C. 1251 *et seq*.

CWA and regulations means the Clean Water Act (CWA) and applicable regulations promulgated thereunder. In the case of an approved State program, it includes State program requirements.

Daily Discharge means the "discharge of a pollutant" measured during a calendar day or any

other 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Direct Discharge means the "discharge of a pollutant."

Director means the Regional Administrator or an authorized representative. In the case of a permit also issued under Massachusetts' authority, it also refers to the Director of the Division of Watershed Management, Department of Environmental Protection, Commonwealth of Massachusetts.

Discharge

(a) When used without qualification, *discharge* means the "discharge of a pollutant."

(b) As used in the definitions for "interference" and "pass through," *discharge* means the introduction of pollutants into a POTW from any non-domestic source regulated under Section 307(b), (c) or (d) of the Act.

Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by Permittees. DMRs must be used by "approved States" as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Discharge of a pollutant means:

(a) Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or

(b) Any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any "indirect discharger."

Effluent limitation means any restriction imposed by the Director on quantities, discharge rates, and concentrations of "pollutants" which are "discharged" from "point sources" into "waters of the United States," the waters of the "contiguous zone," or the ocean.

Effluent limitation guidelines means a regulation published by the Administrator under section 304(b) of CWA to adopt or revise "effluent limitations."

Environmental Protection Agency ("EPA") means the United States Environmental Protection

Agency.

Grab Sample means an individual sample collected in a period of less than 15 minutes.

Hazardous substance means any substance designated under 40 C.F.R. Part 116 pursuant to Section 311 of CWA.

Incineration is the combustion of organic matter and inorganic matter in sewage sludge by high temperatures in an enclosed device.

Indirect discharger means a nondomestic discharger introducing "pollutants" to a "publicly owned treatment works."

Interference means a discharge (see definition above) which, alone or in conjunction with a discharge or discharges from other sources, both:

(a) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

(b) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resources Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SDWA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile.

Land application is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

Land application unit means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for agricultural purposes or for treatment and disposal.

LC_{50} means the concentration of a sample that causes mortality of 50% of the test population at a specific time of observation. The LC_{50} = 100% is defined as a sample of undiluted effluent.

Maximum daily discharge limitation means the highest allowable "daily discharge."

Municipal solid waste landfill (MSWLF) unit means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 C.F.R. § 257.2. A MSWLF unit also may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, very small quantity generator waste and industrial solid waste. Such a landfill may be

publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion. A construction and demolition landfill that receives residential lead-based paint waste and does not receive any other household waste is not a MSWLF unit.

Municipality

(a) When used without qualification *municipality* means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of CWA.

(b) As related to sludge use and disposal, *municipality* means a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal Agency of two or more of the foregoing entities) created by or under State law; an Indian tribe or an authorized Indian tribal organization having jurisdiction over sewage sludge management; or a designated and approved management Agency under Section 208 of the CWA, as amended. The definition includes a special district created under State law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in Section 201 (e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use or disposal of sewage sludge.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318, and 405 of the CWA. The term includes an "approved program."

New Discharger means any building, structure, facility, or installation:

(a) From which there is or may be a "discharge of pollutants;"

(b) That did not commence the "discharge of pollutants" at a particular "site" prior to August 13, 1979;

(c) Which is not a "new source;" and

(d) Which has never received a finally effective NPDES permit for discharges at that "site."

This definition includes an "indirect discharger" which commences discharging into "waters of the United States" after August 13, 1979. It also includes any existing mobile point source (other than an offshore or coastal oil and gas exploratory drilling rig or a coastal oil and gas exploratory drilling rig or a coastal oil and gas exploratory drilling rig or a coastal oil and gas developmental drilling rig) such as a seafood processing rig, seafood processing vessel, or aggregate plant, that begins discharging at a "site" for which it does not have a permit; and any offshore or coastal mobile oil and gas exploratory drilling rig or coastal mobile oil and gas developmental drilling rig that commences the discharge of pollutants after August 13, 1979, at a "site" under EPA's permitting jurisdiction for which it is not covered by an individual or general permit and which is located in an area determined by the Director in the issuance of a final permit to be in an area of biological concern. In determining whether an area is an area of biological concern, the Director shall consider the factors specified in 40 C.F.R. §§ 125.122 (a) (1) through (10).

An offshore or coastal mobile exploratory drilling rig or coastal mobile developmental drilling rig will be considered a "new discharger" only for the duration of its discharge in an area of biological concern.

New source means any building, structure, facility, or installation from which there is or may be a "discharge of pollutants," the construction of which commenced:

(a) After promulgation of standards of performance under Section 306 of CWA which are applicable to such source, or

(b) After proposal of standards of performance in accordance with Section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal.

NPDES means "National Pollutant Discharge Elimination System."

Owner or operator means the owner or operator of any "facility or activity" subject to regulation under the NPDES programs.

Pass through means a Discharge (see definition above) which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Pathogenic organisms are disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova.

Permit means an authorization, license, or equivalent control document issued by EPA or an "approved State" to implement the requirements of Parts 122, 123, and 124. "Permit" includes an NPDES "general permit" (40 C.F.R § 122.28). "Permit" does not include any permit which has not yet been the subject of final agency action, such as a "draft permit" or "proposed permit."

Person means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Person who prepares sewage sludge is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

pH means the logarithm of the reciprocal of the hydrogen ion concentration measured at 25° Centigrade or measured at another temperature and then converted to an equivalent value at 25° Centigrade.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff (see 40 C.F.R. § 122.3).

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials

(except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq*.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. It does not mean:

(a) Sewage from vessels; or

(b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil and gas production and disposed of in a well, if the well is used either to facilitate production or for disposal purposes is approved by the authority of the State in which the well is located, and if the State determines that the injection or disposal will not result in the degradation of ground or surface water resources.

Primary industry category means any industry category listed in the NRDC settlement agreement (*Natural Resources Defense Council et al. v. Train*, 8 E.R.C. 2120 (D.D.C. 1976), *modified* 12 E.R.C. 1833 (D.D.C. 1979)); also listed in Appendix A of 40 C.F.R. Part 122.

Privately owned treatment works means any device or system which is (a) used to treat wastes from any facility whose operator is not the operator of the treatment works and (b) not a "POTW."

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly owned treatment works (POTW) means a treatment works as defined by Section 212 of the Act, which is owned by a State or municipality (as defined by Section 504(4) of the Act). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in Section 502(4) of the Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

Regional Administrator means the Regional Administrator, EPA, Region I, Boston, Massachusetts.

Secondary industry category means any industry which is not a "primary industry category."

Septage means the liquid and solid material pumped from a septic tank, cesspool, or similar domestic sewage treatment system, or a holding tank when the system is cleaned or maintained.

Sewage Sludge means any solid, semi-solid, or liquid residue removed during the treatment of municipal waste water or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced waste water treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 C.F.R. Part 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.

Sewage sludge incinerator is an enclosed device in which only sewage sludge and auxiliary fuel are fired.

Sewage sludge unit is land on which only sewage sludge is placed for final disposal. This does

not include land on which sewage sludge is either stored or treated. Land does not include waters of the United States, as defined in 40 C.F.R. § 122.2.

Sewage sludge use or disposal practice means the collection, storage, treatment, transportation, processing, monitoring, use, or disposal of sewage sludge.

Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substance designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Significant spills includes, but is not limited to, releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the CWA (see 40 C.F.R. §§ 110.10 and 117.21) or Section 102 of CERCLA (*see* 40 C.F.R. § 302.4).

Sludge-only facility means any "treatment works treating domestic sewage" whose methods of sewage sludge use or disposal are subject to regulations promulgated pursuant to section 405(d) of the CWA, and is required to obtain a permit under 40 C.F.R. § 122.1(b)(2).

State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, or an Indian Tribe as defined in the regulations which meets the requirements of 40 C.F.R. § 123.31.

Store or storage of sewage sludge is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

Storm water means storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm water discharge associated with industrial activity means the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

Surface disposal site is an area of land that contains one or more active sewage sludge units.

Toxic pollutant means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing Section 405(d) of the CWA.

Treatment works treating domestic sewage means a POTW or any other sewage sludge or waste water treatment devices or systems, regardless of ownership (including federal facilities), used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated for the disposal of sewage sludge. This definition does not include septic tanks or similar devices.

For purposes of this definition, "domestic sewage" includes waste and waste water from humans or household operations that are discharged to or otherwise enter a treatment works. In States where there is no approved State sludge management program under Section 405(f) of the CWA, the Director may designate any person subject to the standards for sewage sludge use and

disposal in 40 C.F.R. Part 503 as a "treatment works treating domestic sewage," where he or she finds that there is a potential for adverse effects on public health and the environment from poor sludge quality or poor sludge handling, use or disposal practices, or where he or she finds that such designation is necessary to ensure that such person is in compliance with 40 C.F.R. Part 503.

Upset see B.5.a. above.

Vector attraction is the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.

Waste pile or *pile* means any non-containerized accumulation of solid, non-flowing waste that is used for treatment or storage.

Waters of the United States or waters of the U.S. means:

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate "wetlands;"

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands", sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

    (1) Which are or could be used by interstate or foreign travelers for recreational or other purpose;

    (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

    (3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 C.F.R. § 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland.

Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole Effluent Toxicity (WET) means the aggregate toxic effect of an effluent measured directly by a toxicity test.

*Zone of Initial Dilution (*ZID) means the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports, provided that the ZID may not be larger than allowed by mixing zone restrictions in applicable water quality standards.

2. Commonly Used Abbreviations

BOD	Five-day biochemical oxygen demand unless otherwise specified
CBOD	Carbonaceous BOD
CFS	Cubic feet per second
COD	Chemical oxygen demand
Chlorine	
Cl_2	Total residual chlorine
TRC	Total residual chlorine which is a combination of free available chlorine (FAC, see below) and combined chlorine (chloramines, etc.)
TRO	Total residual chlorine in marine waters where halogen compounds are present
FAC	Free available chlorine (aqueous molecular chlorine, hypochlorous acid, and hypochlorite ion)
Coliform	
Coliform, Fecal	Total fecal coliform bacteria
Coliform, Total	Total coliform bacteria
Cont.	Continuous recording of the parameter being monitored, i.e. flow, temperature, pH, etc.
Cu. M/day or M^3/day	Cubic meters per day
DO	Dissolved oxygen

kg/day	Kilograms per day
lbs/day	Pounds per day
mg/L	Milligram(s) per liter
mL/L	Milliliters per liter
MGD	Million gallons per day
Nitrogen	
Total N	Total nitrogen
NH_3-N	Ammonia nitrogen as nitrogen
NO_3-N	Nitrate as nitrogen
NO_2-N	Nitrite as nitrogen
NO_3-NO_2	Combined nitrate and nitrite nitrogen as nitrogen
TKN	Total Kjeldahl nitrogen as nitrogen
Oil & Grease	Freon extractable material
PCB	Polychlorinated biphenyl
Surfactant	Surface-active agent
Temp. °C	Temperature in degrees Centigrade
Temp. °F	Temperature in degrees Fahrenheit
TOC	Total organic carbon
Total P	Total phosphorus
TSS or NFR	Total suspended solids or total nonfilterable residue
Turb. or Turbidity	Turbidity measured by the Nephelometric Method (NTU)
µg/L	Microgram(s) per liter
WET	"Whole effluent toxicity"
ZID	Zone of Initial Dilution

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

Purpose of this test:
- ☐ Initial limit determination
- ☐ Compliance monitoring for: year _____ calendar quarter _____
- ☐ Supplemental or extra test

SAMPLE COLLECTION INFORMATION

Sampling Date: ___ ___ _____ (mm dd yy) Sampling time: _____ AM/PM

Sampling Location:

Weather Conditions: _____

Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection:

Optional test - not required but recommended where possible to allow for the most meaningful evaluation of mercury results:

Suspended Solids _____ mg/L Sample type: _____ Grab (recommended) or _____ Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

Date of analysis: _____ **Result:** _____ **ng/L (PPT)**

Please Enter Effluent Limits for your facility

Effluent Limits: **Average =** _____ ng/L **Maximum =** _____ ng/L

Please attach any remarks or comments from the laboratory that may have a bearing on the results or their interpretation. If duplicate samples were taken at the same time please report the average.

CERTIFICATION

I certifiy that to the best of my knowledge the foregoing information is correct and representative of conditions at the time of sample collection. The sample for mercury was collected and analyzed using EPA Methods 1669 (clean sampling) and 1631 (trace level analysis) in accordance with instructions from the DEP.

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
MARINE WATERS

Facility Name _____ MEPDES Permit # _____

Pipe # _____

Facility Representative _____ Signature _____

By signing this form, I attest that to the best of my knowledge that the information provided is true, accurate, and complete.

Facility Telephone # _____ Date Collected _____ Date Tested _____

mm/dd/yy mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

Results	**% effluent**	
	mysid shrimp	**sea urchin**
A-NOEL		
C-NOEL		

Effluent Limitations	
A-NOEL	
C-NOEL	

Data summary	**mysid shrimp**	**sea urchin**
	% survival	**% fertilized**
QC standard	**>90**	**>70**
lab control		
receiving water control		
conc. 1 (%)		
conc. 2 (%)		
conc. 3 (%)		
conc. 4 (%)		
conc. 5 (%)		
conc. 6 (%)		
stat test used		

Salinity Adjustment	
brine	
sea salt	
other	

place * next to values statistically different from controls

Reference toxicant	mysid shrimp	sea urchin
	A-NOEL	C-NOEL
toxicant / date		
limits (mg/L)		
results (mg/L)		

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

Report WET chemistry on DEP Form "ToxSheet (Marine Version), March 2007."

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

Facility Name _____ **MEPDES #** _____ **Pipe #** _____ Facility Representative Signature _____
To the best of my knowledge this information is true, accurate and complete.

Licensed Flow (MGD)	
Acute dilution factor	
Chronic dilution factor	
Human health dilution factor	
Criteria type: M(arine) or F(resh)	m

Flow for Day (MGD)[1] _____ **Flow Avg. for Month (MGD)**[2] _____

Date Sample Collected _____ **Date Sample Analyzed** _____

Laboratory _____ Telephone _____
Address _____
Lab Contact _____ Lab ID # _____

Last Revision - July 1, 2015

ERROR WARNING ! Essential facility information is missing. Please check required entries in bold above.

MARINE AND ESTUARY VERSION

Please see the footnotes on the last page.

WHOLE EFFLUENT TOXICITY

			Effluent Limits, %			Receiving Water or Ambient	**Effluent Concentration (ug/L or as noted)** WET Result, % Do not enter % sign	Reporting Limit Check	**Possible Exceedence** [7]		
			Acute	Chronic					Acute	Chronic	
	Mysid Shrimp										
	Sea Urchin										

WET CHEMISTRY

	pH (S.U.) (9)										
	Total Organic Carbon (mg/L)					NA					
	Total Solids (mg/L)					NA					
	Total Suspended Solids (mg/L)					NA					
	Salinity (ppt.)										

ANALYTICAL CHEMISTRY [3]

	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L Acute[6]	Chronic[6]	Health[6]			Reporting Limit Check	**Possible Exceedence** [7] Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA					
	AMMONIA	NA				(8)					
M	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1				(8)					
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)					
M	CYANIDE, TOTAL	5				(8)					
	CYANIDE, AVAILABLE [3a]	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

	PRIORITY POLLUTANTS [4]		Effluent Limits						Possible Exceedence [7]		
		Reporting Limit	Acute[6]	Chronic[6]	Health[6]			Reporting Limit Check	Acute	Chronic	Health
M	ANTIMONY	5									
M	BERYLLIUM	2									
M	MERCURY (5)	0.2									
M	SELENIUM	5									
M	THALLIUM	4									
A	2,4,6-TRICHLOROPHENOL	5									
A	2,4-DICHLOROPHENOL	5									
A	2,4-DIMETHYLPHENOL	5									
A	2,4-DINITROPHENOL	45									
A	2-CHLOROPHENOL	5									
A	2-NITROPHENOL	5									
A	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25									
A	4-NITROPHENOL	20									
A	P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)+B80	5									
A	PENTACHLOROPHENOL	20									
A	PHENOL	5									
BN	1,2,4-TRICHLOROBENZENE	5									
BN	1,2-(O)DICHLOROBENZENE	5									
BN	1,2-DIPHENYLHYDRAZINE	20									
BN	1,3-(M)DICHLOROBENZENE	5									
BN	1,4-(P)DICHLOROBENZENE	5									
BN	2,4-DINITROTOLUENE	6									
BN	2,6-DINITROTOLUENE	5									
BN	2-CHLORONAPHTHALENE	5									
BN	3,3'-DICHLOROBENZIDINE	16.5									
BN	3,4-BENZO(B)FLUORANTHENE	5									
BN	4-BROMOPHENYLPHENYL ETHER	5									
BN	4-CHLOROPHENYL PHENYL ETHER	5									
BN	ACENAPHTHENE	5									
BN	ACENAPHTHYLENE	5									
BN	ANTHRACENE	5									
BN	BENZIDINE	45									
BN	BENZO(A)ANTHRACENE	8									
BN	BENZO(A)PYRENE	5									
BN	BENZO(G,H,I)PERYLENE	5									
BN	BENZO(K)FLUORANTHENE	5									
BN	BIS(2-CHLOROETHOXY)METHANE	5									
BN	BIS(2-CHLOROETHYL)ETHER	6									
BN	BIS(2-CHLOROISOPROPYL)ETHER	6									
BN	BIS(2-ETHYLHEXYL)PHTHALATE	10									
BN	BUTYLBENZYL PHTHALATE	5									
BN	CHRYSENE	5									
BN	DI-N-BUTYL PHTHALATE	5									
BN	DI-N-OCTYL PHTHALATE	5									
BN	DIBENZO(A,H)ANTHRACENE	5									
BN	DIETHYL PHTHALATE	5									
BN	DIMETHYL PHTHALATE	5									
BN	FLUORANTHENE	5									

Maine Department of Environmental Protection
WET and Chem
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

BN	FLUORENE	5									
BN	HEXACHLOROBENZENE	5									
BN	HEXACHLOROBUTADIENE	5									
BN	HEXACHLOROCYCLOPENTADIENE	10									
BN	HEXACHLOROETHANE	5									
BN	INDENO(1,2,3-CD)PYRENE	5									
BN	ISOPHORONE	5									
BN	N-NITROSODI-N-PROPYLAMINE	10									
BN	N-NITROSODIMETHYLAMINE	5									
BN	N-NITROSODIPHENYLAMINE	5									
BN	NAPHTHALENE	5									
BN	NITROBENZENE	5									
BN	PHENANTHRENE	5									
BN	PYRENE	5									
P	4,4'-DDD	0.05									
P	4,4'-DDE	0.05									
P	4,4'-DDT	0.05									
P	A-BHC	0.2									
P	A-ENDOSULFAN	0.05									
P	ALDRIN	0.15									
P	B-BHC	0.05									
P	B-ENDOSULFAN	0.05									
P	CHLORDANE	0.1									
P	D-BHC	0.05									
P	DIELDRIN	0.05									
P	ENDOSULFAN SULFATE	0.1									
P	ENDRIN	0.05									
P	ENDRIN ALDEHYDE	0.05									
P	G-BHC	0.15									
P	HEPTACHLOR	0.15									
P	HEPTACHLOR EPOXIDE	0.1									
P	PCB-1016	0.3									
P	PCB-1221	0.3									
P	PCB-1232	0.3									
P	PCB-1242	0.3									
P	PCB-1248	0.3									
P	PCB-1254	0.3									
P	PCB-1260	0.2									
P	TOXAPHENE	1									
V	1,1,1-TRICHLOROETHANE	5									
V	1,1,2,2-TETRACHLOROETHANE	7									
V	1,1,2-TRICHLOROETHANE	5									
V	1,1-DICHLOROETHANE	5									
V	1,1-DICHLOROETHYLENE (1,1-dichloroethene)	3									
V	1,2-DICHLOROETHANE	3									
V	1,2-DICHLOROPROPANE	6									
V	1,2-TRANS-DICHLOROETHYLENE (1,2-trans-dichloroethene)	5									
V	1,3-DICHLOROPROPYLENE (1,3-dichloropropene)	5									
V	2-CHLOROETHYLVINYL ETHER	20									
V	ACROLEIN	NA									
V	ACRYLONITRILE	NA									
V	BENZENE	5									

Maine Department of Environmental Protection
WET and Chem
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V	BROMOFORM	5									
V	CARBON TETRACHLORIDE	5									
V	CHLOROBENZENE	6									
V	CHLORODIBROMOMETHANE	3									
V	CHLOROETHANE	5									
V	CHLOROFORM	5									
V	DICHLOROBROMOMETHANE	3									
V	ETHYLBENZENE	10									
V	METHYL BROMIDE (Bromomethane)	5									
V	METHYL CHLORIDE (Chloromethane)	5									
V	METHYLENE CHLORIDE	5									
V	TETRACHLOROETHYLENE (Perchloroethylene or Tetrachloroethene)	5									
V	TOLUENE	5									
V	TRICHLOROETHYLENE (Trichloroethene)	3									
V	VINYL CHLORIDE	5									

Notes:

(1) Flow average for day pertains to WET/PP composite sample day.

(2) Flow average for month is for month in which WET/PP sample was taken.

(3) Analytical chemistry parameters must be done as part of the WET test chemistry.

(3a) Cyanide, Available (Cyanide Amenable to Chlorination) is not an analytical chemistry parameter, but may be required by certain discharge permits .

(4) Priority Pollutants should be reported in micrograms per liter (ug/L).

(5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.

(6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% - to allow for new or changed discharges or non-point sources).

(7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.

(8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.

(9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

Comments:

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Prepared Jointly by the Maine Department of Environmental Protection and
The U.S. Environmental Protection Agency – New England Office

PERMIT NUMBER: ME0100200
LICENSE NUMBER: W002598-6C-G-R

PUBLIC NOTICE DATE: October 24, 2024 – November 25, 2024

NAME AND ADDRESS OF APPLICANT:

City of Eastport
78 High Street
Eastport, Maine 04631

COUNTY: Washington County

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Main Wastewater Treatment Facility
County Road, Eastport, Maine 04631

RECEIVING WATER Cobscook Bay

CLASSIFICATION: Class SC

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Annaleis Hafford, P.E.; Contract Operator
207-223-2232

Table of Contents

1. APPLICATION SUMMARY

a. Application

The City of Eastport (Eastport) is a municipal discharger as defined by 40 C.F.R. § 122.2. Eastport has applied for renewal of a combined Section 301(h) modified National Pollutant Discharge Elimination System (NPDES) permit #ME0100200 and Maine Waste Discharge License (WDL) #W002598-6C-G-R, that was issued on March 21, 2019 and expired on March 19, 2024. The City has applied for renewal of a combined Section 301(h) modified National Pollutant Discharge Elimination System (NPDES). The permit/license (permit hereinafter) approved the discharge of up to 0.82 million gallons per day (MGD) of primary treated sanitary wastewater to Cobscook Bay, Class SC, in Eastport, Maine. See Figure 1 of this Fact Sheet for a location map.

b. Source Description

Sanitary wastewaters received at the treatment facility are generated by residential and commercial entities in the City of Eastport. The facility receives no flow from industrial sources. All CSOs have been eliminated from the collection system. The wastewater collection system consists of 10 miles of interceptor and collector sewers and six (6) submersible pump stations. The collection system has been upgraded over time and the newer sewer lines have reduced the quantity of infiltration and inflow (I&I). The collection system consists of a triplex submersible pump station at Middle Street, 2,400 linear feet of 10-inch diameter force main to the treatment plant and 3,200 feet of gravity outfall sewer to Cobscook Bay. The Middle Street pump station includes a bar rack, gas detection system, wet well, pumps and piping, valve pit, control panel and stand-by emergency generator (housed in a building).

c. Wastewater Treatment

The City treatment facility provides a primary level of treatment and consists of (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 Cobscook Bay by way of a twenty-four (24) inch diameter pipe that is submerged at mean low water.

In 2021, an upgrade was completed which restored the headworks grit system equipment, retrofitted original Imhoff tanks to primary clarifiers, upgraded the chlorination system including new bulk chemical storage and chemical delivery, provided new mixed aerated sludge storage, new dewatering systems, new potable water system, and updated carrier water and elutriation system. This upgrade also included a plant-wide SCADA control and monitoring system.

Wastewater 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 wastewater 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 tanks 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 wastewater flows from the Imhoff tanks to the chlorine contact tank for disinfection. The wastewater is disinfected by the addition of chlorine in a mixing chamber at the head end of the contact tank. The wastewater 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 Cobscook Bay via the ocean outfall. See Figure 2 of this Fact Sheet for a schematic of the wastewater treatment processes.

2. PERMIT SUMMARY

a. Regulatory

Section 301(h) of the Clean Water Act (CWA) provides a vehicle by which a permittee may request a variance from secondary treatment requirements. Although the State of Maine received authorization from the U. S. Environmental Protection Agency (EPA) to administer the NPDES permit program in Maine on January 12, 2001, the Clean Water Act does not allow delegation of the 301(h)-waiver process to States. Therefore, issuance of a permit granting such a variance may only be issued by the EPA.

Also, pursuant to Maine law, anyone discharging pollutants to waters of the State must obtain a license to do so from the State of Maine. Therefore, this document serves as a combination NPDES permit and a Maine WDL, to satisfy both federal and State requirements.

EPA may not issue a permit unless the State Water Pollution Control Agency with jurisdiction over the receiving water(s) either certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate the State WQSs or it is deemed that the state has waived its right to certify. Regulations governing state certification are set forth in 40 C.F.R. § 124.53 and § 124.55. EPA has requested permit certification by the State pursuant to 40 C.F.R. § 124.53 and expects that the Draft Permit will be certified.

If the State believes that any conditions more stringent than those contained in the Draft Permit are necessary to meet the requirements of either the CWA §§ 208(e), 301, 302, 303, 306 and 307 or the appropriate requirements of State law, the State should include such conditions and, in each case, cite the CWA or State law reference upon which that condition is based. Failure to provide such a citation waives the right to certify as to that condition. The only exception to this is that the sludge conditions/requirements implementing § 405(d) of the CWA are not subject to the § 401 State Certification requirements. Reviews and appeals of limitations and conditions attributable to State certification shall be made through the applicable procedures of the State and may not be made through the applicable procedures of 40 C.F.R. § 124.

In addition, the State should provide a statement of the extent to which any condition of the Draft Permit can be made less stringent without violating the requirements of State law. Since the State's certification is provided prior to permit issuance, any failure by the State to provide this statement waives the State's right to certify or object to any less stringent condition.

It should be noted that under CWA § 401, EPA's duty to defer to considerations of state law is intended to prevent EPA from relaxing any requirements, limitations or conditions imposed by state law. Therefore, "[a] State may not condition or deny a certification on the grounds that State law allows a less stringent permit condition." See 40 C.F.R. § 124.55(c). In such an instance, the regulation provides that, "The Regional Administrator shall disregard any such certification conditions or denials as waivers of certification." Id. EPA regulations pertaining to permit limits based upon water quality standards and state requirements are contained in 40 C.F.R. § 122.4 (d) and 40 C.F.R. § 122.44(d).

b. History[1]

March 24, 1982 - The Department issued Waste Discharge License #2598 authorizing the discharge of untreated municipal wastewaters to Cobscook Bay, until a new wastewater treatment plant was completed.

December 28, 1982 - The City of Eastport submitted final applications to the EPA for a variance from secondary treatment requirements (primary treatment only) for the discharges pursuant to Section 301(h) of the Clean Water Act (CWA).

May 14, 1985 – The EPA signed a 301(h) decision to allow the City of Eastport to discharge primary treated wastewater to Cobscook Bay.

December 31, 1985 - The EPA issued NPDES permit #ME0100200 for the City discharge. At the time of permit issuance, the existing sewer system for the City consisted of a combined system that discharged untreated wastewaters directly to the Cobscook Bay via twenty (20) outfalls.

[1] This section is included to provide useful historical background information for this permit. In some cases, the supporting documentation for this background information may no longer be available from the municipality, state and/or EPA.

April 6, 1987 - The Department issued waste discharge license renewal #W002598-45-A-R with limitations and monitoring requirements similar to other NPDES permits and State licenses issued at that time for facilities with a variance from secondary treatment requirements.

August 9, 1988 - The Department issued a certification, pursuant to section 401 of the CWA, of the public notice draft NPDES permit modification #ME0100200. The modification included an increased flow from the City outfall from 0.34 MGD to 0.82 MGD and the addition of combined sewer overflow points #027 through #030.

August 26, 1988 - The EPA issued NPDES permit modification #ME0100200 for a five-year term.

May 1992 - The primary treatment facilities became operational.

November 1, 1995 – The Department issued WDL #W002598-46-B-R for a five-year term.

March 26, 1999 – The Department administratively modified WDL #W002598-46-B-R to require year-round disinfection due to the potential adverse impacts to an adjacent shellfish harvesting area by the wastewater discharges.

January 12, 2001 – The Department received authorization from the Environmental Protection Agency (EPA) to administer the NPDES program in Maine. Because the permit was being issued under a variance from secondary treatment requirements under the CWA, the modified 301(h) permits must be issued by EPA.

May 22, 2002 – The Department issued a Section 401 Water Quality Certification (#W002598-5L-D-R) to EPA indicating that the proposed primary treatment discharge from the Town's main plant would not cause or contribute to failure of the water body to attain the standards of its assigned classification.

August 13, 2002 – The Department and EPA issued a combined WDL and NPDES permit (#W002598-5L-C-R and ME0100200) authorizing the discharge of up to 0.82 MGD of primary treated wastewater from the permittee's facility for a five-year term. It is noted the permitting of the main plant and the Quoddy Village facility were separated at this point in time. The main plant maintained the original NPDES number of #ME0100200 and State WDL of #W002598 and the Quoddy Village facility was assigned a new NPDES number, #ME0102148 and WDL #W008131.

August 10, 2007 – The Town of Eastport submitted an application to the Department and EPA for renewal of the August 13, 2002 license/permit.

August 28, 2008 – The Draft Permit, Fact Sheet and Tentative 301(h) Decision Document went to 30-day public notice.

October 6, 2008 - The Department issued a Section 401 Water Quality Certification (#W002598-5L-E-R) to EPA indicating that the proposed primary treatment discharge from the Town's main plant would not cause or contribute to failure of the water body to attain the standards of its assigned classification.

November 18, 2008 – The Department and EPA issued a combined WDL and NPDES permit (#W002598-5L-E-R and ME0100200) authorizing the discharge of up to 0.82 MGD of primary treated wastewater from the permittee's facility for a five-year term.

August 2, 2013 Date of initial receipt of application by MEDEP of the City of Eastport application for renewal of the license/permit for the Eastport Main Facility.

August 2, 2013 Date of application acceptance by MEDEP.

October 2013 Eastport submits a 301(h) Waiver Reapplication to EPA.

November 18, 2013 –Combined WDL and NPDES permit (#W002598-5L-E-R and ME0100200) expired and administratively continued.

March 21, 2019 – The Department and EPA issued a combined WDL and NPDES permit (#W002598-5L-E-R and ME0100200) authorizing the discharge of up to 0.82 MGD of primary treated wastewater from the permittee's facility for a five-year term.

February 7, 2024 - Eastport submits a current 301(h) Waiver Reapplication to EPA.

March 20, 2024 –Combined WDL and NPDES permit (#W002598-5L-E-R and ME0100200) expired and administratively continued.

3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S. Section 414 A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S., 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.

Maine law, 38 M.R.S., Section 469 classifies the receiving water at the point of discharge as Class SC water. Maine water quality standards at 38 M.R.S., Section 465-B(3) contain the

designated uses and specific water quality criteria for Class SC waters. Designated uses are identified as 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. [2003, c. 227, §8 (AMD).]

Federal regulation 40 C.F.R. 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.

4. RECEIVING WATER QUALITY CONDITIONS

Cobscook Bay, which is part of Passamaquoddy Bay, at the point of discharge is a marine water subject to tidal action with a difference in tides (mean high to mean low) of up to 19 feet with very strong currents[2]. Maine law, 38 M.R.S. § 469 classifies the receiving waters at the point of discharge as Class SC waters. Maine law, 38 M.R.S. § 465-B(3) contains the classification standards for Class SC waters.

Section 303(d) of the Federal Clean Water Act (CWA) requires states to identify those waterbodies that are not expected to meet surface water quality standards after the implementation of technology-based controls and, as such require the development of total maximum daily loads (TMDL).

The State of Maine 2018/2020/2022 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, lists the receiving water as:

> Non-Shellfishing Use: Category 2 - Estuarine and Marine Waters – Attaining Some Designated Uses
>
> Shellfishing Use: Category 3 - Estuarine and Marine Waters – Insufficient Information

a. <u>Shellfishing</u>

Eastport's wastewater treatment facility discharges to a shellfish harvesting area that the Maine Department of Marine Resources (DMR) has designated as shellfish Area 59, Outer Cobscook Bay (Eastport and Perry).

[2] National Oceanographic and Atmospheric Agency, Tides & Currents website: Phys. Oceanography Eastport, ME - Station ID: 8410140.

DMR traditionally closes shellfish harvesting areas near outfall pipes when 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. As discussed in Section 8e, compliance with the monthly average and daily maximum limitations for fecal coliform bacteria is intended to ensure the Eastport facility will not cause or contribute to any bacteria violations within a shellfish harvesting area.

b. Biological Monitoring

In accordance with federal regulation, municipalities with CWA Section 301(h) waivers from secondary treatment "must have a monitoring program that is designed to provide data to evaluate the impact of the modified discharge on the marine biota, demonstrate compliance with applicable water quality standards or water quality criteria, as applicable, and measure toxic substances in the discharge" (*see* 40 C.F.R. § 125.63(a)(1)(i)). The first round of Maine 301(h) waiver permits[3] included requirements for sediment monitoring and benthic surveys to be conducted by SCUBA divers. To alleviate the cost of each waiver applicant conducting their own SCUBA surveys, MEDEP agreed to conduct the SCUBA surveys on behalf of the applicants. Between 1987 and 1994 four surveys were conducted by MEDEP biologist/SCUBA divers.

The results of the "field surveys and sampling of several facilities demonstrate that there is no impact, nor is any impact likely, from the discharge of primary treated wastewater from the 301(h) participating facilities.[4]" One of the permittees, Boothbay Harbor, had been in operation for 22 years at the time of the survey. The biologists found no solids deposition within the outfall zone of initial dilution (ZID) or the control sites. They found no discernable difference between bottom dwelling organisms, flora and fauna within the ZID and again at control sites. The biologist found the same to be true in each of the four facilities surveyed. The divers also observed that, due to its relatively low density, the effluent rose toward the surface of the ocean and was quickly dispersed by longshore currents.

However, after surveying the sites of four facility outfalls, by letter dated February 17, 1995 from the EPA Regional Administrator, the EPA agreed with the MEDEP that further SCUBA inspections of 301(h) outfalls was too dangerous due to the swift currents generally found in these receiving waters. David Courtemanch, the MEDEP Senior Biologist and diver with the most experience in potential impact of the 301(h) facilities in Maine concluded that "any monitoring beyond effluent sampling is useless, wasteful, and of no environmental benefit.[5] He also noted that strong currents and tides around each of the outfall presented technical difficulties and risks to divers that could not be justified in future field surveys.

[3] The 14 Maine 301(h) waivers were granted in the 1980s except for Stonington which was granted in 1994. Seven of the 14 municipalities no longer have 301(h) waivers, having upgraded to secondary treatment or ceased discharging to surface waters.
[4] Transmittal letter to David Fierra, Director, Water Management Division US EPA, New England from Martha Kirkpatrick, MEDEP Director Bureau of Land and Water Quality dated October 28. 1994 for the: MEDEP 301(h) Facilities in Maine, Determining the Necessary Scope of Study for Assurance of Environmental Protection.
[5] Ibid.

Another study of 40 marine outfalls published in the Marine Pollution Bulletin Journal[6] found that the "main physical processes that govern the mixing and evolution of wastewater in the ocean are turbulent dispersion, transport (advection and diffusion) and resuspension …In high energy environments all constituents will be broadly dispersed with a minor chance of concentrating." The study demonstrated where significant currents and wave action were present, there was almost no degradation to the marine environment from small municipal dischargers.

EPA and MEDEP agree that effluent limits and monitoring requirements are sufficiently protective of the aquatic environment at the point of discharge so as not to require additional biological monitoring. This decision is consistent with 40 C.F.R. § 125.63(a)(1)(i)(B) which states that the monitoring requirements are "limited to include only those scientific investigations necessary to study the effects of the proposed discharge" and 40 C.F.R. § 125.63(b)(1) which specifies that monitoring is required to the extent practicable.

5. WAIVER OF TREATMENT REQUIREMENTS

Under Section 301(b)(1)(B) of the Clean Water Act (CWA), publicly owned treatment works (POTWs) in existence on July 1, 1977 were required to meet effluent limitations based on secondary treatment, which is defined in terms of the parameters BOD, TSS and pH.

National effluent limitations for these pollutants were promulgated and are included in POTW permits issued under Section 402 of the CWA.

Congress subsequently amended the CWA, adding Section 301(h), which authorizes the EPA Administrator, with State concurrence, to issue NPDES permits modifying the secondary treatment requirements with respect to the discharge of pollutants from a POTW into marine waters, provided that the applicant meet several conditions.

EPA issued a 301(h) waiver to Eastport on May 14, 1985, based upon the following findings:

- That the discharge will comply with the State of Maine water quality standards for dissolved oxygen and suspended solids.
- That the proposed discharge will not adversely impact public water supplies as the discharge is to salt water and there are no nearby desalinization facilities.
- The discharge will not interfere with the protection and propagation of a balanced indigenous population of marine life and will allow for recreational activities.
- That the discharge will not result in additional treatment requirements on other point and non-point sources.
- That the State of Maine concurs with the approval of the 301(h) waiver.

[6] Marine Pollution Bulletin Journal (101(2015)174–181): Response of benthos to ocean outfall discharges: does a general pattern exist? A. Puente, R.J. Diaz: www.elsevier.com/locate/marpolbul

Federal regulation 40 C.F.R. Part 125.57(a)(3), states that the applicant must establish a system for monitoring the impact of POTW discharges with 301(h) waivers on a representative sample of aquatic biota, to the extent practicable, and the scope of such monitoring must be limited to include only those scientific investigations which are necessary to study the effects of the proposed discharge.

EPA has decided that the scope of effluent limitations and monitoring requirements in this permit are sufficient to provide the necessary information to study the effects of the discharge on the receiving waters.

Because all the prior 301(h) conditions have been maintained and because there has been no new or substantially increased discharge from the permittee's facility, EPA proposes, through the re-issuance of the Eastport permit, to carry forward the original 301(h) waiver decision.

6. ENDANGERED SPECIES ACT

Section 7(a) of the Endangered Species Act of 1973, as amended (ESA), grants authority to and imposes requirements on Federal agencies regarding species of fish, wildlife, or plants that have been federally listed as endangered or threatened (listed species) and regarding habitat of such species that has been designated as critical (critical habitat).

Section 7(a)(2) of the ESA requires every federal agency, in consultation with and with the assistance of the Secretary of Interior and the Secretary of Commerce, to ensure that any action it authorizes, funds or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for federally protected bird, terrestrial and freshwater species, while the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) administers Section 7 consultations for listed species of marine organisms (including marine mammals and reptiles), as well as for anadromous fish species.

The federal action being considered in this case is EPA's proposed reissuance of an NPDES permit for the Facility's discharge of pollutants. The Draft Permit is intended to replace the 2019 Permit in authorizing discharges from the Facility. As the federal agency charged with authorizing the Facility's pollutant discharges, EPA assesses potential impacts to federally listed species and critical habitat and initiates consultation to the extent required, under Section 7(a)(2) of the ESA.

EPA has reviewed the federal endangered or threatened species of fish, wildlife, and plants in the expected action area of the outfalls to determine if EPA's proposed NPDES permit could potentially impact any such listed species.

a. <u>Terrestrial and Avian Species (US Fish and Wildlife Service)</u>

Regarding protected species under the jurisdiction of USFWS, three species may be present in the action area of the Facility's discharge,[7] the endangered northern long-eared bat (*Myotis septentrionalis*), the endangered roseate tern (*Sterna dougallii dougallii*) and the proposed endangered tricolored bat (*Perimyotis subflavus)*.

According to the USFWS, the northern long-eared bat is found in, "winter – mines and caves, summer – wide variety of forested habitats." This species is not considered aquatic. However, because the Facility's projected action area overlaps with the general statewide range of the northern long-eared bat, EPA submitted an evaluation on potential effects of the project to the Information for Planning and Consultation (IPaC) system provided by the USFWS. The USFWS system confirmed by letter that, based on the specific project information submitted, the project would have "no effect" on the northern long-eared bat[8].

At this time, no such USFWS IPaC mechanism is in place to evaluate potential impacts to the proposed endangered tricolored bat. Because the habitat of the tricolored bat is generally similar to the NLE bat (overwintering - caves or mines; spring/summer/fall – deciduous live or dead hardwood trees), EPA has determined that the reissuance of this permit would also have "no effect" on the proposed endangered tricolored bat[9].

Finally, the action area of the facility may overlap with the roseate tern. According to the USFWS:

> *The roseate tern (Sterna dougallii) is found throughout the world. The North Atlantic subspecies, Sterna dougallii dougallii, is divided into two populations in North America because they breed in two discrete areas and rarely mix. The Northeastern population, federally listed as endangered, breeds on coastal islands from Eastern Canada, in Nova Scotia and Quebec, to New York.*
>
> *….*
>
> *Unfortunately, the bird's beauty led to its decline as hunters shot them indiscriminately to decorate hats in the late 1800s. Since the 1930s, the species began to rebound when hunting was banned and many of its breeding colonies were protected. Nevertheless, the two populations remain small and vulnerable to extirpation because many of their breeding colony sites are no longer suitable for nesting. This lack of suitable nesting is due to the combined negative impacts from sea level rise, predation and human development.*

EPA has determined that because the reissuance of this permit will not impact the above factors, this federal action will have no effect on the roseate tern. To support this no effect determination, EPA also completed a USFWS determination key that made the same conclusion.[8]

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[7] *See* https://ecos.fws.gov/ipac/
[8] USFWS IPaC Project code: 2024-0140668, September 6, 2024.
[9] EPA Supplemental Basis Document – Tricolored Bat; May 14, 2024.

This concluded EPA's consultation responsibilities for this NPDES permitting action under ESA section 7(a)(2) with respect to the northern long-eared bat, tricolored bat, and roseate tern. No ESA section 7 consultation is required with USFWS for these species.

b. Marine and Anadromous Species (National Marine Fisheries Service)

The Facility discharges into the Cobscook Bay, which is part of Passamaquoddy Bay. The outfall and action area overlap with coastal waters where several protected marine species are found. Three species of anadromous fish; shortnose sturgeon (*Acipenser brevirostrum*), Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), and Atlantic salmon (*Salmo salar*) are potentially present in the vicinity of the discharge. In general, adults and subadults of these species are present in coastal waters.

Also present in the action area are four listed species of sea turtle, including: the leatherback sea turtle (*Dermochelys coriacea*), green sea turtle (*Chelonia mydas*), kemp's ridley sea turtle (*Lepidochelys kempii*), and the loggerhead sea turtle (*Caretta caretta*). According to NOAA Fisheries, adult and juvenile life stages of leatherback, loggerhead, Kemp's ridley and green sea turtles are expected in coastal Maine waters from June 1 through November 30 while migrating and foraging. Also, adult shortnose sturgeon and adult and subadult Atlantic sturgeon are likely present in the action area.

Because these species may be affected by the discharges authorized by the proposed permit, EPA has thoroughly evaluated the potential impacts of the permit action on these anadromous species. Based on that evaluation, EPA's preliminary determination is that this action may affect, but is not likely to adversely affect, the protect species that are expected in the vicinity of the action area of the discharge. Therefore, EPA has judged that a formal consultation pursuant to Section 7 of the ESA is not required. EPA is seeking concurrence from NOAA Fisheries regarding this determination during the Draft Permit's public comment period.

Initiation of consultation is required and shall be requested by EPA or by USFWS/NOAA Fisheries where discretionary federal involvement or control over the action has been retained or is authorized by law and if: 1) new information reveals that the action may affect listed species or critical habitat in a manner or to an extent not previously considered in the analysis; 2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the previous analysis; 3) a new species is listed or critical habitat designated that may be affected by the identified action; or 4) there is any incidental taking of a listed species that is not covered by an incidental take statement.

7. 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*., EPA is required to consult with NOAA Fisheries if proposed actions that EPA funds, permits, or undertakes, "may adversely impact any essential fish habitat." *See* 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". *See* 16 U.S.C. § 1802(10). "Adverse impact" means any impact that reduces the quality and/or quantity of EFH. 50 CFR § 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. A New England Fishery Management Council's Omnibus Essential Fish Habitat Amendment in 2017 updated the descriptions. The information is included on the NOAA Fisheries website at: https://www.fisheries.noaa.gov/topic/habitat-conservation. In some cases, a narrative identifies rivers and other waterways that should be considered EFH due to present or historic use by federally managed species.

The Federal action being considered in this case is EPA's proposed NPDES permit for the Eastport Wastewater Treatment Facility, which discharges though Outfall 001 to Cobscook Bay as discussed in Section 4.1 of this document. Based on available EFH information, including the NOAA Fisheries EFH Mapper,[10] EPA has determined that the receiving water in the vicinity of the discharge is designated as EFH for the species shown in Table 1, below.

Table 1. EFH Designated Species

Species/Management Unit	Lifestage(s) Found at Location
American Plaice	Adults, Juveniles, Eggs, Larvae
Atlantic Cod	Adult, Juvenile, Larvae
Atlantic Herring	Adults, Juvenile, Larvae
Atlantic Mackerel	Adult, Juvenile, Larvae
Atlantic Sea Scallop	All
Little Skate	Adult, Juvenile
Ocean Pout	Adult, Eggs, Juvenile
Pollock	Adult, Juvenile, Larvae
Red Hake	Adult, Eggs/Larvae/Juvenile
Silver Hake	Adult
Smooth Skate	Juvenile
Thorny Skate	Juvenile
White Hake	Adult, Juvenile
Windowpane Flounder	Adults, Eggs, Juvenile, Larvae
Winter Flounder	Eggs, Juvenile, Larvae/Adult
Winter Skate	Juvenile

[10] https://www.habitat.noaa.gov/apps/efhmapper/

Habitat Area of Particular Concern
Atlantic Salmon
Inshore 20m Juvenile Cod

Therefore, consultation with NOAA Fisheries under the Magnuson-Stevens Fishery Conservation and Management Act is required. EPA has determined that actions regulated by the Draft Permit may adversely affect EFH. The Draft Permit has been conditioned in the following ways to minimize any impacts that reduce the quality and/or quantity of EFH for the species listed in Table 1.

- This Draft Permit action does not constitute a new source of pollutants because it is the reissuance of an existing NPDES permit;

- Discharge limitations have been proposed for pH, total suspended solids, settleable solids, fecal coliform bacteria, enterococci bacteria, total residual chlorine, total mercury, in order to meet technology-based or state water quality standards;

- The Draft Permit proposes new annual whole effluent toxicity (WET) and priority pollutant testing to ensure that the discharge does not cause toxicity problems; Acute and chronic toxicity tests will be conducted annually to evaluate the lethality of the discharge;

- The effluent limitations and conditions in the Draft Permit were developed to be protective of all aquatic life;

- The proposed Draft Permit requirements minimize any reduction in quality and/or quantity of EFH, either directly or indirectly.

EPA has determined that the conditions and limitations contained in the Draft Permit adequately protect all aquatic life, as well as the essential fish habitat for the species listed above in Cobscook Bay. Further mitigation is not warranted. Should adverse impacts to EFH be detected as a result of this permit action, or if new information is received that changes the basis for EPA's conclusions, NOAA Fisheries Habitat and Ecosystem Services Division will be contacted and an EFH consultation will be re-initiated.

At the beginning of the public comment period, EPA notified NOAA Fisheries Habitat and Ecosystem Services Division that the Draft Permit and this Fact Sheet were available for review and provided a link to the EPA NPDES Permit website to allow direct access to the documents.

In addition to this Fact Sheet and the Draft Permit, information to support EPA's finding was included in a letter under separate cover that will be sent to the NOAA Fisheries Habitat and Ecosystem Services Division during the public comment period.

8. EFFLUENT LIMITATIONS

a. Effluent Flow

The sewage treatment plant discharge is encompassed within the definition of "pollutant" and is subject to regulation under the CWA. The CWA defines "pollutant" to mean, inter alia, "municipal . . . waste" and "sewage…discharged into water." 33 U.S.C. § 1362(6).

EPA may use design flow of effluent both to determine the necessity for effluent limitations in the permit that comply with the Act, and to calculate the limits themselves.

EPA practice is to use design flow as a reasonable and important worst-case condition in EPA's reasonable potential and water quality-based effluent limitations (WQBEL) calculations to ensure compliance with water quality standards under Section 301(b)(1)(C). Should the effluent discharge flow exceed the flow assumed in these calculations, the instream dilution would decrease, and the calculated effluent limits may not be protective of WQS. Further, pollutants that do not have the reasonable potential to exceed WQS at the lower discharge flow may have reasonable potential at a higher flow due to the decreased dilution.

To ensure that the assumptions underlying the Region's reasonable potential analyses and derivation of permit effluent limitations remain sound for the duration of the permit, the Region may ensure its "worst-case" effluent wastewater flow assumption through imposition of permit conditions for effluent flow. Thus, the effluent flow limit is a component of WQBELs because the WQBELs are premised on a maximum level of flow. In addition, the flow limit is necessary to ensure that other pollutants remain at levels that do not have a reasonable potential to exceed WQS.

Using a facility's design flow in the derivation of pollutant effluent limitations, including conditions to limit wastewater effluent flow, is consistent with, and anticipated by NPDES permit regulations. Regarding the calculation of effluent limitations for POTWs, 40 C.F.R. § 122.45(b)(1) provides, "permit effluent limitations…shall be calculated based on design flow." POTW permit applications are required to include the design flow of the treatment facility. Id. § 122.21(j)(1)(vi).

Similarly, EPA's reasonable potential regulations require EPA to consider "where appropriate, the dilution of the effluent in the receiving water," 40 C.F.R. § 122.44(d)(1)(ii), which is a function of both the wastewater effluent flow and receiving water flow.

EPA guidance directs that this "reasonable potential" (RP) analysis be based on "worst-case" conditions. EPA accordingly is authorized to carry out its reasonable potential calculations by presuming that a plant is operating at its design flow when assessing reasonable potential.

The limitation on sewage effluent flow is within EPA's authority to condition a permit in order to carry out the objectives of the Act. See CWA §§ Sections 402(a)(2) and 301(b)(1)(C); 40 C.F.R. §§ 122.4(a) and (d); 122.43 and 122.44(d).

A condition on the discharge designed to protect EPA's WQBEL and RP calculations is encompassed by the references to "condition" and "limitations" in 402 and 301 and implementing regulations, as they are designed to assure compliance with applicable water quality regulations, including antidegradation. Regulating the quantity of pollutants in the discharge through a restriction on the quantity of wastewater effluent is consistent with the overall structure and purposes of the CWA.

In addition, as provided in Part II.B.1 of this permit and 40 C.F.R. § 122.41(e), the permittee is required to properly operate and maintain all facilities and systems of treatment and control. Operating the facilities wastewater treatment systems as designed includes operating within the facility's design effluent flow. Thus, the permit's effluent flow limitation is necessary to ensure proper facility operation, which in turn is a requirement applicable to all NPDES permits. See 40 C.F.R. § 122.41.

The 2019 permit established a flow limitation of 820,000 gallons per day (gpd). The limit was originally established by the EPA on November 2, 1985 when the waiver was granted. The average monthly flow discharged from the facility from July 2019 through June 2024 ranged from 50,800 to 323,000 gpd. The median of the monthly averages was 117,000 gpd, well below the flow limit. The 820,000 gpd flow limit is continued in the Draft Permit.

b. Dilution Factors

Maine DEP Rule, 06-096 CMR, Chapter 530: Surface Water Toxics Control Program, § 4.A(2)(a) requires that for discharges to non-estuarine marine waters dilution 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.

Modeling[11] has determined that at the full permitted flow of 820,000 gpd, the discharge from the Eastport waste water treatment facility will be diluted by the following factors:

Acute = 14:1 Chronic = 341:1 Harmonic mean = 1,023:1

The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3).

Treated effluent is discharged to Cobscook Bay at high tide via a 24-inch diameter outfall pipe. The outfall pipe extends approximately 500 feet offshore. At mean low tide, approximately 9 feet of water covers the crown of the pipe.

[11] DEP CORMIX Modeling performed 07/06/2001.

c. Biochemical oxygen demand (BOD) and total suspended solids (TSS)

Federal regulations state that primary or equivalent treatment means treatment by screening, sedimentation, and skimming adequate to remove at least thirty percent (30%) of the BOD and 30% of the TSS material in the treatment works influent. The Department and EPA consider a thirty percent (30%) removal of BOD and a fifty percent (50%) removal of TSS from the influent loading as a best professional judgment (BPJ) determination of best practicable treatment (BPT) for primary facilities. These percent removal requirements were established in the previous permitting action and are being carried forward in this permitting action as the percent removal is the foundation for the permitting of 301(h) facilities.

The 2019 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. A full monthly monitoring data set for July 2019 through June 2024 is provided in Appendix A. As can be seen from the data, the facility has met its BOD and TSS effluent limits.

The percent removal requirement is being carried forward. Percent removal is calculated as follows:

$$\frac{(Z \text{ mg/L} - X \text{ mg/L}) * (100\%)}{(Z \text{ mg/L})} = Y \% \text{ Removal}$$

Where,

Z = Monthly Average influent Concentration in mg/L,
X = Monthly Average effluent concentration in mg/L and
Y = Actual Monthly Average Percent Removal

The BOD and TSS effluent limits in the Draft Permit continue this approach and were derived as follows:

Using the flow limit of 820,000 gpd (0.82 MGD),

BOD: 290 mg/L – [(290 mg/L)(0.30)] = **203 mg/L**
(203 mg/L)(8.34)(0.82 MGD) = **1,388 lbs/day**

TSS: 290 mg/L – [(290 mg/L)(0.50)] = **145 mg/L**
(145 mg/L)(8.34)(0.82 MGD) = **992 lbs/day**

The sampling frequency in the Draft Permit is 1/week. The once per week monitoring for BOD and TSS is based on a BPJ determination by the Department and EPA given the size and type of treatment facility.

d. Settleable Solids

The settleable solids test indicates how the solids are settling in a treatment plant. "Settleable Solids" is the term applied to the material settling out of suspension within a defined period of time. The settleable solids test can help the operator estimate the volume of sludge to be expected. Conventional primary treatment units remove 90 to 95% of settleable solids. This test is mostly for operational control and thus it is reported without limits.

The 2019 Permit included a daily maximum concentration reporting requirement with a once per week monitoring frequency. A review of the DMR data from July 2019 through June 2024 (see Appendix A) indicates that the daily maximum concentrations were all below the detection limit of 0.1 ml/L.

The Draft Permit continues the requirement to report settleable solids with the same weekly monitoring frequency.

e. Enterococci Bacteria and Fecal Coliform Bacteria

Specific types of non-pathogenic bacteria are used as indicator organisms, or surrogates, for waterborne pathogens (bacteria, viruses, etc.) which enter surface waters from a variety of sources, including human sewage and the feces of warm-blooded wildlife.
These pathogens can pose a risk to human health due to gastrointestinal illness through different exposure routes, including contact with and ingestion of recreational waters, ingestion of drinking water, and consumption of shellfish.[12]

Enterococci

Maine water quality standards use enterococci as indicator organisms for protection of estuarine and marine recreational waters (38 M.R.S. § 465-B). Because contact recreation occurs largely in the summer months, the enterococci criteria are applied seasonally between April 15th and October 31st. The 2019 established enterococci limits with a monthly geometric mean of 14 cfu/100 ml and a maximum daily limit of 94 cfu/100 ml with weekly monitoring. The limits apply seasonally from April 15th through October 31st. These limits are carried forward in the Draft Permit.

Fecal Coliform

[12] Maine Statewide Bacteria TMDL (Total Maximum Daily Loads) August 2009
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Maine water quality standards apply, by reference, the numeric criteria recommended by the National Shellfish Sanitation Program, Unites States Food and Drug Administration (*see* 38 M.R.S. § 465-B(2)(A). Unlike the bacteria criteria to protect recreational uses which are applicable seasonally, Maine's coliform criteria to protect shellfishing uses apply year-round.

Bacteria are limited in the 2019 Permit to average and daily maximum concentration limits of 14 colonies/100 ml and 31 colonies/100 ml, respectively. These limits were based on DEP's interpretation of the National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish. The 2019 Permit applied the fecal coliform limits year-round. As can been seen from the monthly monitoring data set for July 2019 through June 2024 (see Appendix A), Eastport was able to meet the monthly average fecal coliform limit consistently, with one monthly average violation. However, the daily maximum fecal coliform limits were exceeded three times during that period.

The Maine Department of Marine Resources (MEDMR) regulates shellfishing within the state. MEDMR sets shellfish closure areas around all outfalls discharging sanitary wastewater to protect shellfish beds in case of failure of disinfection systems. Even with the outfall closure areas, the permit limits must still protect the designated uses[13] which include *harvesting of shellfish*.[14] The MEDMR closure does not remove the designated use of *harvesting of shellfish*, nor EPA's responsibility to set fecal coliform limits in the Draft Permit to protect that use. The Maine Class SB water quality standards state:

> 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, United States Food and Drug Administration.[15]

The Food and Drug Administration (FDA) periodically updates the shellfish standards. The most recent revision is the National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish, 2023 Revision. EPA will apply the same bacteriological standards from this Guidance Document, as used by the MDMR in the protection shellfish resources[16] as permit limits. These specify that:

> The fecal coliform median or geometric mean most probable number (MPN) or membrane filter (MF) (membrane-Thermotolerant Escherichia coli [mTEC]) of the water sample results shall not exceed fourteen (14) per 100 ml, and not more than ten (10) percent of the samples shall exceed an MPN or MF (mTEC) of: (a) 43 MPN per 100 ml for a five-tube decimal dilution test; (b) 49 MPN per 100 ml for a three-tube decimal

[13] 40 C.F.R. §131.3(f) Designated uses are those uses specified in water quality standards for each water body or segment whether or not they are being attained.
[14] 38 M.R.S. §465-B(3). Standards for classification of estuarine and marine waters
[15] 38 MRSA Ch. 3 §465-B(2). Standards for classification of estuarine and marine waters-Class SB waters
[16] National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish 2023 Revision section 02.

dilution test; (c) 28 MPN per 100 ml for a twelve-tube single dilution test; or (d) 31 colony-forming units (CFU) per 100 ml for a MF[17] (mTEC) test.

The Draft Permit includes limits of 14 cfu/100 ml and 31 cfu/100 ml, which are carried forward from the 2019 Permit and are consistent with the recommendations in the 2023 NSSP Guide for the Control of Molluscan Shellfish. The monitoring frequency requirement of once per week is based on MEDEP guidance for POTWs and is applicable year-round, consistent with Maine's water quality standards. The permittee may continue to use the Standard Method 9222-D-1997- Thermotolerant (Fecal) Coliform Membrane Filter Procedure which is the closest method to that used by MEDMR that is approved for wastewater under 40 C.F.R. § 136.

f. Total residual chlorine (TRC)

Total Residual Chlorine (TRC) - Chlorine compounds resulting from the disinfection process can be extremely toxic to aquatic life. Limits on total residual chlorine are specified to ensure attainment of the in-stream water quality criteria for chlorine. The instream chlorine criteria are defined in National Recommended Water Quality Criteria: 2002, EPA 822R-02-047 (November 2002), as adopted by the Maine DEP into the Chapter 584: Surface Water Quality Criteria for Toxic Pollutants[18]. The criteria establish that the total residual chlorine in the receiving water should not exceed 13 µg/l (acute). Maine also applies a technology-based best practicable treatment (BPT) limit of 1.0 mg/L.

The 2019 Permit included a water quality based daily maximum limitation of 0.18 mg/L based on a dilution of 14:1 and with monitoring frequency of 1/Day. During the last five years (see Appendix A), TRC concentrations in the effluent ranged from 0 to 0.055 mg/L, with a median of 0.003 mg/L, well below the daily maximum TRC effluent limit.

End-of-pipe water quality-based concentration thresholds may be calculated as follows.

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	13 µg/L	7.5 µg/L	14:1	341:1	0.18 mg/L	2.6 mg/L

Example Calculation of acute limit – 0.013 mg/L (14) = 0.18 mg/L
BPT chronic limit = 1.0 mg/L

To limit the toxic effects of chlorine compounds, permits issued with MEDEP 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. The monitoring frequency remains daily.

[17] A membrane filtration test method using Modified membrane-Thermotolerant Escherichia coli or mTEC agar or medium.
[18] Ch. 584, Surface Water Quality Criteria for Toxic Pollutants http://maine.gov/dep/water/rules/index.html

g. pH

Pursuant to 40 C.F.R § 125.61(a) There must exist a water quality standard or standards applicable to the pollutant(s) [including] pH. Additionally, Maine Water Quality Standards state that: Discharge of pollutants to any water of the State that violates sections 465…or causes the "pH" of estuarine and marine waters to fall outside of the 7.0 to 8.5 range is not permissible.

The 2019 Permit included a BPT pH range limit of 6.0 to 9.0 standard units pursuant to Department rule, Chapter 525(3)(III)(c), along with a monitoring frequency of once per week. A review of the DMR data (see Appendix A) for the July 2019 through June 2024 review period indicates that the pH of the effluent ranged from 6.0 to 7.2 standard units, within the effluent limits.

The Draft Permit proposes to continue the pH limits from the 2019 Permit (6.0 to 9.0 standard units), consistent with the secondary treatment standards for pH found in 40 C.F.R. § 133.102(c) and consistent with the BPT approach Maine regulations.

h. Whole Effluent Toxicity (WET) & Chemical-Specific Testing

Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing, as required by Chapter 530, is included in this permit to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate and vertebrate species. Priority pollutant and analytical chemistry testing is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria as established in Chapter 584.

Chapter 530 establishes four categories of testing requirements based predominately on the chronic dilution factor. The categories are as follows:

1) Level I – chronic dilution factor of <20:1.
2) Level II – chronic dilution factor of ≥20:1 but <100:1.
3) Level III – chronic dilution factor ≥100:1 but <500:1 or >500:1 and Q ≥1.0 MGD
4) Level IV – chronic dilution >500:1 and Q ≤1.0 MGD

Department rule Chapter 530 (2)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the Eastport facility falls into the Level III frequency category as the facility has a chronic dilution factor ≥100:1 but <500:1. Chapter 530(2)(D)(1) specifies that surveillance and screening level testing requirements are as follows:

Screening level testing

Level	WET Testing	Priority pollutant testing	Analytical chemistry
III	1 per year	1 per year	4 per year

Surveillance level testing

Level	WET Testing	Priority pollutant testing	Analytical chemistry
III	1 per year	None required	1 per year

Chapter 530(2)(D)(3)(d) states in part that for Level III facilities "… may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E)".

Chapter 530 §(3)(E) states "For effluent monitoring data and the variability of the pollutant in the effluent**,** the Department shall apply the statistical approach in Section 3.3.2 and Table 3-2 of USEPA's "Technical Support Document for Water Quality-Based Toxics Control" (USEPA Publication 505/2-90-001, March, 1991, EPA, Office of Water, Washington, D.C.) to data to determine whether water-quality based effluent limits must be included in a waste discharge license. Where it is determined through this approach that a discharge contains pollutants or WET at levels that have a reasonable potential to cause or contribute to an exceedance of water quality criteria, appropriate water quality-based limits must be established in any licensing action."

WET test evaluation

Chapter 530 §3 states, "In determining if effluent limits are required, the Department shall consider all information on file and effluent testing conducted during the preceding 60 months. However, testing done in the performance of a Toxicity Reduction Evaluation (TRE) approved by the Department may be excluded from such evaluations."

On September 12, 2024, EPA conducted a statistical evaluation on the most recent 60 months of WET test results on file with MEDEP in accordance with the statistical approach in Chapter 530. The statistical evaluation included one A-NOEL test result of the Mysid Shrimp and on C-NOEL test result of the Sea Urchin, both taken on September 13, 2022. The A-NOEL result of 8.065 % complied with the critical water quality threshold of 7.14 % (1/14) and the C-NOEL result of 2.016 % complied with the critical water quality thresholds of 0.29 %.

Therefore, this permit is waiving surveillance level WET testing. Department rule Chapter 530 (2)(D)(1) specifies that screening level testing is to be established as follows:

Beginning 24 months prior to and lasting through 12 months prior to permit expiration (year 4 of the permit) and every five years thereafter.

Level	WET Testing
I	1 per year for the mysid shrimp 1 per year for the sea urchin

Chapter 530 §(2)(D) states:

> *(4) All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.*
>
> *(a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;*
> *(b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and*
> *(c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.*

Special Condition J, 06-096 CMR 530 (2)(D)(4) *Statement For Reduced/Waiver Toxics Testing,* of this permitting action requires the permittee to file an annual certification with the Department.

Analytical chemistry & priority pollutant testing evaluation

As with WET test results, on September 12, 2024, EPA conducted a statistical evaluation on the most recent 60 months of analytical chemistry and priority pollutant test results on file with the Department in accordance with the statistical approach outlined in Chapter 530. The statistical evaluation indicates there are no test results for any parameters that exceed or have a reasonable potential to exceed any acute or chronic AWQC. EPA also evaluated the pollutant testing submitted with the 2024 application and determined that none of the pollutants exceed or have a reasonable potential to exceed any acute or chronic AWQC.

Chapter 530(2)(D)(3)(d) states in part that for Level III facilities "… may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E)". Therefore, based on the results of the September 12, 2024 evaluation report, this permit action is waving surveillance level analytical testing requirements.

Beginning 24 months prior to permit expiration and lasting through 12 months prior to permit expiration (Year 4 of the term of the permit) and every five years thereafter, screening level testing is as follows:

Level	Priority pollutant testing	Analytical chemistry
I	1 per year	4 per year

As with WET testing, Chapter 530 (2)(D) requires an annual certification to qualify for reduced testing. Special Condition J, 06-096 CMR 530 (2)(D)(4) Statement *for Reduced/Waived Toxics Testing*, of this permitting action requires the permittee to file an annual certification with the Department.

i. Mercury

On May 23, 2000, pursuant to Certain deposits and discharges prohibited, 38 M.R.S. § 420 and Waste discharge licenses, 38 M.R.S. § 413 and Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 CMR 519 (last amended October 6, 2001), the MEDEP issued a Notice of Interim Limits for the Discharge of Mercury to the permittee, administratively modifying WDL #W002598 by establishing interim average and maximum effluent concentration limits of 236.9 nanograms per liter (ng/L) and 355.4 ng/L, respectively, and a minimum monitoring frequency requirement of one (1) test per year for mercury. A review of the MEDEP's data base for the period July 2000 to March 2018 indicates mercury test results have ranged from 5.20 ng/L to 190.00 ng/L with an arithmetic mean (n=28) of 35.47 ng/L. These limits were included in the 2019 Permit.

During the review period (see Appendix B), the permittee did not have any violations of these limits. These limits have been carried forward in the Draft Permit.

j. Aesthetics

Part C of the Draft Permit includes two narrative effluent requirements designed to ensure the protection of aesthetic uses of the receiving water, as follows:

1. The effluent must not contain materials that cause a visible oil sheen, foam or floating solids in the receiving waters.

2. The discharge must not cause a change in color, taste, or turbidity in the receiving waters.

To ensure compliance with these requirements, the Draft Permit, in the table at Part B.1. includes a reporting requirement for "Aesthetics," and a footnote which more specifically requires the following monitoring requirements.

Once per month, the Permittee shall conduct a visual inspection of the receiving water in the vicinity of the outfall and report any changes that may be caused by the discharge as follows:

1) any visible change in color,
2) any visible change in turbidity,
3) the presence or absence of any visible foam or floating solids,
4) the presence or absence of any visible oil sheen on the surface of the water.

Although there is no objective means to measure the impact of the discharge on the taste of the receiving water, the Permittee shall report to EPA and MassDEP any complaints it receives from the public regarding taste and/or odor and document what remedial actions, if any, it took to address such complaints.

A summary of the 12 monthly visual inspections as well as any complaints received from the public as described above shall be submitted as an electronic attachment to the December DMR, which is due each January 15th for the previous calendar year.

9. DISCHARGE IMPACT ON RECEIVING WATERS

EPA and the Department have determined that the permit limits and conditions are sufficient to ensure that the existing water uses will be maintained and protected and the discharge will not cause or contribute to failure of the waterbody to meet standards for Class SC classification.

As discussed in Section 8.a, EPA conducted a reasonable potential analysis to ensure that the existing water uses will be maintained and protected. Given that EPA guidance[19] directs that these reasonable potential analyses be based on critical conditions, EPA uses the pollutant concentrations based on all available information provided to EPA during the development of the permit. As discussed in more detail in the pollutant-specific sections below, this information includes data from the Permittee's most recent application, DMR data during the review period, and any other available information included in the administrative record.

If the permitting authority determines that the discharge of a pollutant will cause, has the reasonable potential to cause, or contribute to an excursion above WQSs, the permit must contain WQBELs for that pollutant. *See* 40 CFR § 122.44(d)(1)(i).

[19] See 2010 NPDES Permit Writer's Manual, chapter 6 available at: https://www.epa.gov/sites/default/files/2015-09/documents/pwm_chapt_06.pdf

If the permitting authority determines that the discharge of a pollutant will not cause, have the reasonable potential to cause, or contribute to an excursion above WQSs, the permit does not need to contain WQBELs for that pollutant. However, EPA must ensure that the discharge of that pollutant does not increase during the permit term to the point that would violate water quality standards. Therefore, Part I.E (Unauthorized Discharges) of the permit includes the following provision to ensure that EPA's reasonable potential analyses (for all pollutants) remain protective throughout the life of the permit, and which would also clearly articulate the scope of the protections afforded to the Permittee pursuant to CWA section 402(k):

> "Any pollutant loading greater than the proposed discharge (based on the chemical-specific data and the facility's design flow as described in the permit application, or any other information provided to EPA during the permitting process) is not authorized by this permit."

EPA notes that such increases may be allowable, but the Permittee must first submit a request to EPA to authorize such an increase. This request will allow EPA to conduct an updated reasonable potential analysis to reassess whether a WQBEL is needed for the newly proposed discharge. Permit modification or reissuance may be required before the proposed discharge would be authorized.

10. SLUDGE INFORMATION AND REQUIREMENTS

The sludge and scum are stored in the lower compartment of Imhoff treatment tanks 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.

Section 405(d) of the Clean Water Act requires that sludge conditions be included in all permits for treatment works treating domestic sewage. Maine also regulates sludge under Department Regulations Chapter 400 et seq. If the ultimate sludge disposal method changes, the permittee must notify EPA and DEP and the requirements pertaining to sludge monitoring and other conditions would change accordingly.

11. OPERATIONS AND MAINTENANCE

The permit standard conditions for "Proper Operation and Maintenance" are found at 40 C.F.R. § 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 required by 40 C.F.R. § 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 the reasonable likelihood of adversely affecting human health or the environment. EPA maintains that these programs are an integral component of ensuring permit compliance under both these provisions.

The Draft Permit includes requirements for the permittee to control infiltration and inflow (I&I). 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. 40 C.F.R. § 125.60(c)(iii) addresses I/I in a conventional primary treatment process. It recognizes that significant I/I prior to treatment can hinder the POTW's ability to meet the percent removal limits and allows for their adjustment provided the I/I is deemed non-excessive.[20]

The Eastport sewage collection system has approximately ninety-five thousand (95,000) feet of gravity sewer lines, eight (8) major pump stations and nineteen (19) pumps that are located throughout the collection system. Approximately 67,000 linear feet of 8 and 10-inch sewer pipe serve the Eastport Main Plant.

There are no combined sewer overflows (CSOs) in the Eastport collection system. As required by the "Duty to Mitigate" regulations in 40 C.F.R. § 122.41(d), Eastport must take measures to ensure that there is no overflow of untreated wastewater from the two pump stations.

For the above stated reasons, the permit requires an ongoing program to address and remove I/I from the system. EPA is requiring a written Wet Weather Management Plan (that identifies how the facility will effectively operate during periods of high flow) in the draft permit to ensure proper operation of the WWTF.

Additionally, the Draft Permit, in Part I.I.1. requires the Permittee to develop an Adaptation Plan to address major storm and flood events as part of their operation and maintenance planning for the part of the wastewater treatment system (WWTS) and/or sewer systems that they own and operate. These requirements are new. EPA has determined that these additional requirements are necessary to ensure the proper operation and maintenance of the WWTS and/or sewer system and has included a schedule in the Draft Permit for completing these requirements.

See Appendix B for a further rationale regarding this Adaptation Plan.

12. PUBLIC COMMENTS PERIOD AND PROCEDURES FOR FINAL DECISION

The Draft Permit public notice will be placed on the EPA Region I NPDES website at: https://www.epa.gov/npdes-permits/maine-draft-individual-npdes-permits.

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 EPA Permit Writer and the MEDEP contact named in Section 13 below.

[20] Nonexcessive (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day. 40 C.F.R. §125.60(c)(iii)

Prior to the close of the public comment period, any person may submit a written request to EPA for a public hearing to consider the Draft Permit. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held if the criteria stated in 40 CFR § 124.12 are satisfied. In reaching a final decision on the Draft Permit, EPA will respond to all significant comments in a Response to Comments document attached to the Final Permit and make these responses available to the public on EPA's website.

Following the close of the comment period, and after any public hearings, if such hearings are held, EPA will issue a Final Permit decision, forward a copy of the final decision to the applicant, and provide a copy or notice of availability of the final decision to each person who submitted written comments or requested notice. Within 30 days after EPA serves notice of the issuance of the Final Permit decision, an appeal of the federal NPDES permit may be commenced by filing a petition for review of the permit with the Clerk of EPA's Environmental Appeals Board in accordance with the procedures at 40 CFR § 124.19.

If for any reason, comments on the Draft Permit and/or a request for a public hearing cannot be emailed to the permit writer specified above, please contact them at the telephone number below.
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13. CONTACTS

Additional information concerning this permitting action may be obtained from and written comments should be directed to:

Gregg Wood
Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
State House Station #17
Augusta, ME. 04333-0017
Phone: 207-287-7693
Email: gregg.wood@maine.gov

Meridith Finegan
U.S. Environmental Protection Agency
Mail Code – 06-4
5 Post Office Square – Suite 100
Boston, MA 02109-3912
Phone: 617-918-1533
Email: finegan.meridith@epa.gov

Figure 1 – Location Map

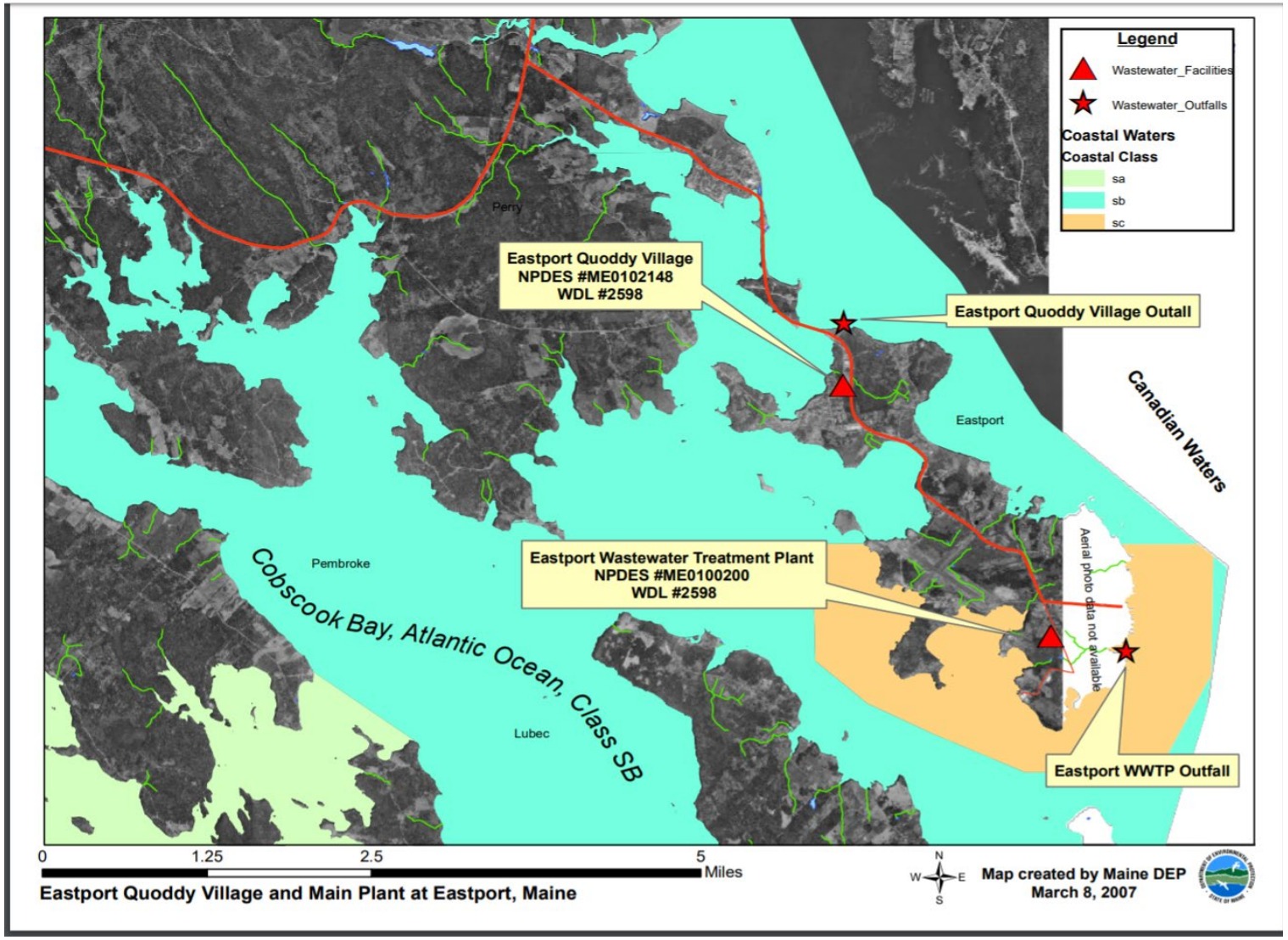
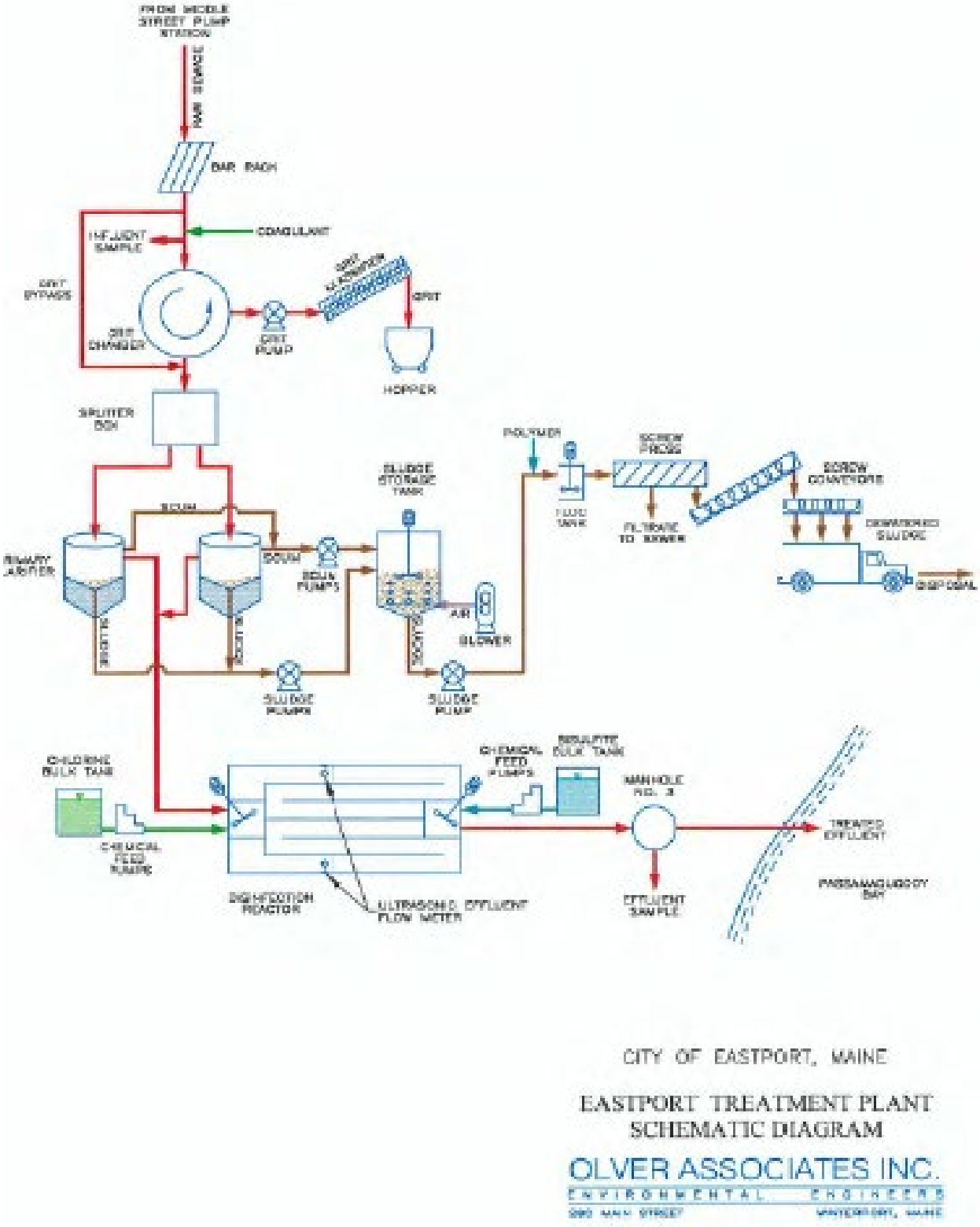


Figure 2 – Flow Schematic



CITY OF EASTPORT, MAINE

EASTPORT TREATMENT PLANT
SCHEMATIC DIAGRAM

OLVER ASSOCIATES INC.
ENVIRONMENTAL ENGINEERS
280 MAIN STREET EASTPORT, MAINE

Outfall 001

Parameter	Flow	BOD5	BOD5	BOD5	BOD5	BOD5	TSS	TSS
	Monthly Ave	Monthly Ave	Monthly Ave	Daily Max	Daily Max	Monthly Ave Min	Monthly Ave	Monthly Ave
Units	gal/d	lb/d	mg/L	lb/d	mg/L	%	lb/d	mg/L
Effluent Limit	820000	1388	203	Report	Report	30	992	145
Minimum	50800	43	24	51	31	28	15	17
Maximum	323000	220	259	569	292	79	58	59
Median	117000	90	118	118	136	58	26	28
No. of Violations	0	0	1	N/A	N/A	1	0	0
7/31/2019	96300	91	124	168	152	52	23	32
8/31/2019	104400	174	146	394	187	47	42	37
9/30/2019	114300	108	142	141	149	46	21	28
10/31/2019	75700	96	143	149	179	43	25	39
11/30/2019	134800	144	134	198	146	49	31	31
12/31/2019	156500	144	118	278	127	56	32	26
1/31/2020	95800	93	129	118	151	58	26	36
2/29/2020	92800	113	149	128	151	44	23	30
3/31/2020	93400	97	123	114	147	57	25	31
4/30/2020	127200	133	136	213	154	50	27	28
5/31/2020	96200	78	128	89	153	49	19	31
6/30/2020	67600	85	159	128	176	53	25	42
7/31/2020	50800	82	175	121	200	48	16	35
8/31/2020	68432	91	160	98	167	53	20	34
9/30/2020	71843	110	178	144	198	37	18	30
10/31/2020	86829	150	177	220	193	44	31	37
11/30/2020	90277	120	174	142	191	40	25	35
12/31/2020	220574	220	122	569	162	54	58	34
1/31/2021	77174	76	129	86	170	51	16	27
2/28/2021	92082	94	129	108	150	60	23	30
3/31/2021	130526	128	140	241	168	49	28	32
4/30/2021	157267	135	124	192	142	53	32	31
5/31/2021	109645	96	152	107	190	55	26	40
6/30/2021	66000	133	259	163	292	28	29	56
7/31/2021	117000	151	170	195	229	30	52	59
8/31/2021	95447	121	158	137	190	51	38	50
9/30/2021	124000	101	135	135	228	63	19	26
10/31/2021	86300	81	118	92	133	61	15	22
11/30/2021	111000	80	93	100	124	67	21	23

Outfall 001

Parameter	Flow	BOD5	BOD5	BOD5	BOD5	BOD5	TSS	TSS
	Monthly Ave	Monthly Ave	Monthly Ave	Daily Max	Daily Max	Monthly Ave Min	Monthly Ave	Monthly Ave
Units	gal/d	lb/d	mg/L	lb/d	mg/L	%	lb/d	mg/L
Effluent Limit	820000	1388	203	Report	Report	30	992	145
12/31/2021	134000	64	63	82	86	64	17	17
1/31/2022	134000	81	73	116	101	60	26	23
2/28/2022	211000	65	52	84	85	48	31	22
3/31/2022	154000	72	56	88	62	60	29	22
4/30/2022	175000	62	47	74	65	60	48	28
5/31/2022	104000	60	66	69	81	60	30	34
6/30/2022	100000	87	101	115	127	63	37	43
7/31/2022	91000	104	132	131	169	53	37	46
8/31/2022	89000	100	136	128	162	53	37	52
9/30/2022	115000	69	88	94	136	63	30	39
10/31/2022	115000	90	85	130	124	65	30	26
11/30/2022	154000	94	75	157	140	62	33	25
12/31/2022	199000	91	55	198	85	74	25	18
1/31/2023	262000	77	55	133	88	69	30	21
2/28/2023	130000	71	67	108	110	64	20	19
3/31/2023	141000	66	62	78	91	67	23	21
4/30/2023	120000	70	66	83	82	68	30	28
5/31/2023	101000	67	83	98	107	64	22	26
6/30/2023	143000	68	56	105	64	69	24	20
7/31/2023	139000	96	80	175	106	71	28	22
8/31/2023	133000	100	80	183	104	71	31	21
9/30/2023	176000	90	88	111	122	67	25	22
10/31/2023	141000	78	81	88	102	59	21	22
11/30/2023	124000	73	76	81	96	67	18	19
12/31/2023	194000	83	67	114	105	58	29	22
1/31/2024	160000	116	81	186	102	55	51	33
2/29/2024	119000	90	74	149	83	64	25	20
3/31/2024	323000	48	24	69	31	74	43	21
4/30/2024	174000	43	36	51	51	79	26	21
5/31/2024	97000	62	80	73	105	70	21	27
6/30/2024	77000	76	120	82	139	55	28	44

Outfall 001

Parameter	TSS	TSS	TSS	pH	pH	Enterococci	Enterococci	TRC
	Daily Max	Daily Max	Monthly Ave Min	Minimum	Maximum	Monthly Geometric Mean	Daily Max	Monthly Ave
Units	lb/d	mg/L	%	SU	SU	MPN/100mL	MPN/100mL	mg/L
Effluent Limit	Report	Report	50	6	9	14	94	0.18
Minimum	16	22	73	6	6.6	0	0	0
Maximum	141	86	93	6.9	7.2	13.4	2419	0.055
Median	38	36	86	6.5	6.8	4	8	0.003
No. of Violations	N/A	N/A	0	0	0	0	1	0
7/31/2019	30	42	86	6.4	6.7			0.002
8/31/2019	86	41	84	6.6	6.7			0.008
9/30/2019	24	31	85	6.5	6.8			0.002
10/31/2019	31	59	81	6.4	6.8			0.002
11/30/2019	39	42	79	6.5	6.6			0.006
12/31/2019	63	29	84	6.4	6.6			0.005
1/31/2020	40	49	85	6.5	6.7			0.004
2/29/2020	40	50	85	6.7	6.9			0.002
3/31/2020	31	36	86	6.5	6.8			0.003
4/30/2020	38	34	87	6.5	6.8	NODI: E	NODI: E	0.002
5/31/2020	25	45	84	6.6	6.8	NODI: E	NODI: E	0.006
6/30/2020	52	62	80	6.3	6.7	13.4	22.8	0.003
7/31/2020	21	41	87	6.5	6.7	6.2	13.8	0.012
8/31/2020	23	37	87	6.5	6.6	12.9	93.5	0.012
9/30/2020	25	42	83	6.4	6.6	1.4	10.8	0.055
10/31/2020	44	48	83	6.4	6.6	1.7	8.4	0.016
11/30/2020	30	41	85	6.5	6.8			0.015
12/31/2020	141	48	83	6.8	7			0.022
1/31/2021	19	35	90	6.7	7			0.018
2/28/2021	36	33	88	6.9	7			0.012
3/31/2021	48	33	86	6.9	7			0.016
4/30/2021	46	34	87	6.8	7.1	9.6	13.7	0.019
5/31/2021	30	51	84	6.7	6.9	4.4	30.9	0.0129
6/30/2021	40	72	82	6.6	7	10	2419	< .05
7/31/2021	73	86	90	6.2	6.8	1	1	< .06
8/31/2021	44	58	75	6	6.9	3	< 4	< .05
9/30/2021	24	47	90	6.2	6.8	< 4	< 4	< .06
10/31/2021	16	25	88	6.2	6.6	< 4	< 4	< .05
11/30/2021	30	34	87	6.1	6.8			< .05

Outfall 001

Parameter	TSS	TSS	TSS	pH	pH	Enterococci	Enterococci	TRC
	Daily Max	Daily Max	Monthly Ave Min	Minimum	Maximum	Monthly Geometric Mean	Daily Max	Monthly Ave
Units	lb/d	mg/L	%	SU	SU	MPN/100mL	MPN/100mL	mg/L
Effluent Limit	Report	Report	50	6	9	14	94	0.18
12/31/2021	21	22	89	6.3	6.8			< .05
1/31/2022	33	27	90	6.5	6.9			0.04
2/28/2022	46	26	93	6.3	7.2			0.02
3/31/2022	33	27	91	6.8	7			0.02
4/30/2022	99	31	87	6.7	7	6	8	< .05
5/31/2022	38	44	93	6.7	6.9	6	12	< .05
6/30/2022	44	56	89	6.6	7.1	5	16	< .05
7/31/2022	46	52	77	6.4	7	6	12	0.006
8/31/2022	46	75	73	6.4	7	< 4	< 4	< .05
9/30/2022	34	50	75	6.5	6.9	4	4	0.01
10/31/2022	45	34	86	6.5	6.9	4	4	0.01
11/30/2022	45	38	83	6.4	6.8			0.02
12/31/2022	33	23	89	6.5	6.8			0.002
1/31/2023	38	25	87	6.5	7			0.002
2/28/2023	24	24	88	6.5	7.2			0.01
3/31/2023	29	30	84	6.5	6.8			0.004
4/30/2023	47	46	83	6.4	6.8	5.7	8	0.01
5/31/2023	39	43	86	6.1	6.6	< 4	< 4	0.01
6/30/2023	29	25	85	6.4	6.9	4.8	8	< .05
7/31/2023	63	38	91	6.5	7.1	6	20.4	0.01
8/31/2023	76	25	88	6.5	6.9	3.4	24	< .05
9/30/2023	37	25	87	6.3	6.7	1.7	8	< .05
10/31/2023	27	24	85	6.2	6.7	3.3	12.4	< .05
11/30/2023	21	24	90	6.3	6.6			< .05
12/31/2023	35	29	82	6.3	6.6			< .05
1/31/2024	108	46	81	6.2	6.6			< .05
2/29/2024	47	24	89	6.2	6.8			< .05
3/31/2024	55	24	73	6.4	6.8			< .05
4/30/2024	35	26	85	6.3	6.7	6.3	8	< .05
5/31/2024	26	33	88	6.4	6.8	4	4	< .05
6/30/2024	30	49	79	6.3	6.7	5.3	12	< .05

Outfall 001

Parameter	TRC	Mercury	Mercury	Solids, settleable	Fecal coliform	Fecal coliform	Solids, settleable	Noael Statre 48Hr Acute Mysid. Bahia
	Daily Max	Monthly Ave	Daily Max	Monthly Ave	Monthly Geometric Mean	Daily Max	Daily Max	Daily Min
Units	mg/L	ng/L	ng/L	mL/L	MPN/100mL	MPN/100mL	mL/L	%
Effluent Limit	1	236.9	355.4	Report	14	31	Report	Report
Minimum	0	1.15	2.3	No Data	0	0	No Data	No Data
Maximum	1.1	30.3	13.8	No Data	17.3	816	No Data	No Data
Median	0.07	Non-Detect	Non-Detect	No Data	4	8	No Data	No Data
No. of Violations	1	0	0	N/A	1	3	N/A	N/A
7/31/2019	0.02	NODI: 8	NODI: 8	< .1	12	30	< .1	
8/31/2019	0.06	NODI: 9	NODI: 9	< .1	10	10	< .1	
9/30/2019	0.03	NODI: 9	NODI: 9	< .1	10	10	< .1	
10/31/2019	0.03	NODI: 9	NODI: 9	< .1	12.5	30	< .1	
11/30/2019	0.06	NODI: 9	NODI: 9	< .1	10	10	< .1	
12/31/2019	0.06	NODI: 9	NODI: 9	< .1	10	10	< .1	
1/31/2020	0.05	NODI: 9	NODI: 9	< .1	13	20	< .1	
2/29/2020	0.02	NODI: 9	NODI: 9	< .1	10	10	< .1	
3/31/2020	0.02	NODI: 9	NODI: 9	< .1	< 10	< 10	< .1	
4/30/2020	0.03	NODI: 9	NODI: 9	< .1	10	10	< .1	
5/31/2020	0.03	NODI: 9	NODI: 9	< .1	12	20	< .1	
6/30/2020	0.02	NODI: 9	NODI: 9	< .1	13.6	30	< .1	
7/31/2020	0.04	NODI: 9	NODI: 9	< .1	13.2	20	< .1	
8/31/2020	0.04	NODI: 9	NODI: 9	< .1	17.3	100	< .1	
9/30/2020	1.1	NODI: 9	NODI: 9	< .1	11.5	20	< .1	
10/31/2020	0.08	1.15	13.8	< .1	1.8	9.4	< .1	
11/30/2020	0.05	NODI: 9	NODI: 9	< .1	1.9	12.7	< .1	
12/31/2020	0.08	NODI: 9	NODI: 9	< .1	2.2	8.4	< .1	
1/31/2021	0.17	NODI: 9	NODI: 9	< .1	1.6	7.3	< .1	
2/28/2021	0.03	NODI: 9	NODI: 9	< .1	1.5	5.1	< .1	
3/31/2021	0.07	NODI: 9	NODI: 9	< .1	1.4	5.1	< .1	
4/30/2021	0.08	NODI: 9	NODI: 9	< .1	2.4	8.4	< .1	
5/31/2021	0.03	NODI: 9	NODI: 9	< .1	1	1	< .1	
6/30/2021	< .05	NODI: 9	NODI: 9	< .1	13	816	< .1	
7/31/2021	0.27	NODI: 9	NODI: 9	< .1	5	36	< .1	
8/31/2021	< .05	NODI: 9	NODI: 9	< .1	4	12	< .1	
9/30/2021	0.26	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	
10/31/2021	0.66	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	
11/30/2021	0.13	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	

Outfall 001

Parameter	TRC	Mercury	Mercury	Solids, settleable	Fecal coliform	Fecal coliform	Solids, settleable	Noael Statre 48Hr Acute Mysid. Bahia
	Daily Max	Monthly Ave	Daily Max	Monthly Ave	Monthly Geometric Mean	Daily Max	Daily Max	Daily Min
Units	mg/L	ng/L	ng/L	mL/L	MPN/100mL	MPN/100mL	mL/L	%
Effluent Limit	1	236.9	355.4	Report	14	31	Report	Report
12/31/2021	0.11	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	
1/31/2022	0.73	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	
2/28/2022	0.16	NODI: 9	NODI: 9	< .1	< 4	4	< .1	
3/31/2022	0.27	NODI: 9	NODI: 9	< .1	4	4	< .1	
4/30/2022	< .05	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	NODI: 9
5/31/2022	< .05	NODI: 9	NODI: 9	< .1	5	12	< .1	NODI: 9
6/30/2022	0.06	NODI: 9	NODI: 9	< .1	5	12	< .1	NODI: 9
7/31/2022	0.19	NODI: 9	NODI: 9	< .1	5	12	< .1	NODI: 9
8/31/2022	< .05	NODI: 9	NODI: 9	< .1	4	4	< .1	NODI: 9
9/30/2022	0.12	NODI: 9	NODI: 9	< .1	5	8	< .1	NODI: 9
10/31/2022	0.11	NODI: 9	NODI: 9	< .1	4	4	< .1	NODI: 9
11/30/2022	0.19	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	NODI: 9
12/31/2022	0.07	NODI: 9	NODI: 9	< .1	4	4	< .1	NODI: 9
1/31/2023	0.08	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	NODI: 9
2/28/2023	0.06	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	NODI: 7
3/31/2023	0.13	NODI: 9	NODI: 9	< .1	4	4	< .1	NODI: 9
4/30/2023	0.19	NODI: 9	NODI: 9	< .1	4	4	< .1	
5/31/2023	0.17	NODI: 9	NODI: 9	< .1	5.3	16.4	< .1	
6/30/2023	< .05	NODI: 9	NODI: 9	< .1	4.8	8	< .1	
7/31/2023	0.31	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	
8/31/2023	0.12	NODI: 9	NODI: 9	< .1	4	4	< .1	
9/30/2023	< .05	NODI: 9	NODI: 9	< .1	1.4	4	< .1	
10/31/2023	0.06	NODI: 9	NODI: 9	< .1	4.1	12.4	< .1	
11/30/2023	0.11	NODI: 9	NODI: 9	< .1	11.7	16.4	< .1	
12/31/2023	< .05	NODI: 9	NODI: 9	< .1	5.6	16.4	< .1	
1/31/2024	0.21	NODI: 9	NODI: 9	< .1	5.7	8	< .1	
2/29/2024	< .05	30.3	2.3	< .1	< 4	< 4	< .1	
3/31/2024	0.34	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	
4/30/2024	0.1	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	
5/31/2024	0.14	NODI: 9	NODI: 9	< .1	< 4	< 4	< .1	
6/30/2024	0.06	NODI: 9	NODI: 9	< .1	5.3	12.4	< .1	

Outfall 001

Parameter	Noel Static 1Hr Fert. Chronic Arbacia	Priority pollutants total effluent	Analytical Chemistry
	Daily Min	Daily Min	VALUE
Units	%	%	Y=1;N=0
Effluent Limit	Report	Report	Report
Minimum	No Data	1	1
Maximum	No Data	1	1
Median	No Data	Non-Detect	Non-Detect
No. of Violations	N/A	N/A	N/A
7/31/2019			
8/31/2019			
9/30/2019			
10/31/2019			
11/30/2019			
12/31/2019			
1/31/2020			
2/29/2020			
3/31/2020			
4/30/2020			
5/31/2020			
6/30/2020			
7/31/2020			
8/31/2020			
9/30/2020			
10/31/2020			
11/30/2020			
12/31/2020			
1/31/2021			
2/28/2021			
3/31/2021			
4/30/2021			
5/31/2021			
6/30/2021			
7/31/2021			
8/31/2021			
9/30/2021			
10/31/2021			
11/30/2021			

Outfall 001

Parameter	Noel Static 1Hr Fert. Chronic Arbacia	Priority pollutants total effluent	Analytical Chemistry
	Daily Min	Daily Min	VALUE
Units	%	%	Y=1;N=0
Effluent Limit	Report	Report	Report
12/31/2021			
1/31/2022			
2/28/2022			
3/31/2022			
4/30/2022	NODI: 9	NODI: 9	1
5/31/2022	NODI: 9	NODI: 9	NODI: 9
6/30/2022	NODI: 9	NODI: 9	NODI: 9
7/31/2022	NODI: 9	NODI: 9	NODI: 9
8/31/2022	NODI: 9	NODI: 9	NODI: 9
9/30/2022	NODI: 9	NODI: 9	NODI: 9
10/31/2022	NODI: 9	NODI: 9	NODI: 9
11/30/2022	NODI: 9	NODI: 9	NODI: 9
12/31/2022	NODI: 9	1	1
1/31/2023	NODI: 9	NODI: 9	NODI: 9
2/28/2023	NODI: 9	NODI: 9	NODI: 9
3/31/2023	NODI: 9	NODI: 9	NODI: 9
4/30/2023			
5/31/2023			
6/30/2023			
7/31/2023			
8/31/2023			
9/30/2023			
10/31/2023			
11/30/2023			
12/31/2023			
1/31/2024			
2/29/2024			
3/31/2024			
4/30/2024			
5/31/2024			
6/30/2024			

APPENDIX B

I. Rationale on the Appropriateness of, and the Authority for, the Inclusion of the Wastewater Treatment System and Sewer System Adaptation Plan Requirements

The adaptation planning requirements proposed in the Draft Permit are new requirements that build on existing operation and maintenance practices. EPA provides this appendix to further explain the basis for and importance of these provisions.

In Section A below, EPA discusses the necessity for requiring the development of Adaptation Plans at wastewater treatment systems ("WWTS") and sewer systems[1] and provides some examples of how major storm and flood events can impact facility operations. In Section B below, EPA discusses the various components and proper scope of an Adaptation Plan. In Section C below, EPA sets forth the legal basis for its decision to require wastewater treatment systems and sewer systems to develop an Adaptation Plan.

A. Necessity for Wastewater Treatment System and Sewer System Adaptation Planning

Wastewater treatment systems and sewer systems are crucial in helping protect human health and the environment and providing critical services to the communities that they serve. Many wastewater treatment facilities and associated sewer system pump stations are located at low elevations (to maximize flow via gravity) within riverine or coastal floodplains and are at risk of increased flooding and other impacts from major storm events. As noted in a 2016 report by the New England Interstate Water Pollution Control Commission[2] wastewater systems are already facing severe effects due to major storm and flood events and need to better adapt to this new reality:

> In the Northeast and throughout the world, extreme storm events are growing in frequency and force. Hurricanes and blizzards threaten the operation of wastewater infrastructure and in some cases the infrastructure itself. Consequently, wastewater facilities should be made more resilient though preparedness planning and physical upgrades.

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[1] The Clean Water Act authorizes EPA, as permit issuer, to issue permits for "publicly owned treatment works" (POTWs). CWA § 402. POTWs comprise wastewater treatment systems and sewer systems. 40 C.F.R. §§ 122.2, 403.3(q); *In re Charles River Pollution Control District*, 16 EAD 623, 635 (EAB 2015) ("POTW treatment plants, like the satellite sewage collection systems that convey wastewater to the plants, are components of a POTW.") To more precisely and accurately describe the permit requirements, the Permit and this Response to Comments refer to "wastewater treatment system(s)" and "sewer system(s)" or, in some instances, both.

"Wastewater Treatment System" or "WWTS" means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It does not include sewers, pipes and other conveyances to the wastewater treatment facility.

[2] "Preparing for Extreme Weather at Wastewater Utilities: Strategies and Tips, New England Interstate Water Pollution Control Commission" (September 2016) pg. 2, https://www.neiwpcc.org/neiwpcc_docs/9-20-2016%20NEIWPCC%20Extreme%20Weather%20Guide%20for%20web.pdf

> In the Northeast in the last five years Hurricanes Irene (2011) and Sandy (2012), and winter blizzards such as the February 2013 northeaster, produced widespread economic harm. Sandy caused nearly 11 billion gallons of sewage to be released into coastal waters, rivers, and other bodies of water as power outages and storm surge overwhelmed wastewater-treatment plants. 94% of these releases were a result of flooding and storm surge as waters overwhelmed sewage-treatment plants.

As a result, addressing the ongoing challenges and the increasing risks faced by wastewater infrastructure systems nationwide - reduction or failure of system services resulting in discharges of untreated or partially treated sewage, flooding, physical damage to assets, impacts to personnel, to name just some of the possible outcomes - are a priority for EPA and a host of federal and state agencies, as well as regional and local governmental bodies. Addressing these challenges is also a priority for many wastewater treatment managers across the country. As noted in a 2019 study,[3] which surveyed wastewater treatment systems in Connecticut, 78% of wastewater managers had made adaptive changes that ranged from low-cost temporary adaptive changes to a few who described major changes that addressed redesign or the rebuilding of WWTPs; of those who had made changes, half "did so to improve resiliency to withstand the worst storm experienced by the wastewater system to date."[4]

Flooding and other major storm events can lead to a variety of, and more frequent, WWTS and sewer system failures. One recent analysis suggests that one-third of 5,500 wastewater treatment plants analyzed from around the country would be at risk of flooding in the event of a major storm.[5] System failures, such as backups of untreated wastewater into the collection system and potentially into buildings and connections, bypasses of pollution treatment, and/or discharges of raw sewage into the environment are some of the potential impacts that may become more frequent.[6]

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[3] "Kirchhoff, C.J. and P.L. Watson. 2019. "Are Wastewater Systems Adapting to Climate Change?" *Journal of the American Water Resources Association*, 1-12. pg.1. https://doi.org/10.1111/1752-1688.12748. (Citations omitted in quote).

[4] Id. at pgs. 5, 8.

[5] "Rising Flood Risks Threaten Many Water and Sewage Treatment Plants Across the U.S."(August 10, 2023), https://apnews.com/article/climate-change-flood-risks-infrastructure-vermont-7bd953f513035468ee74f8f7c619bb8e

[6] See EPA's Resilient Strategies Guide (noting that "[u]tilities are increasingly recognizing that future extreme weather events, energy prices and ecological conditions may not be predictable based on historical observations. These shifts may require utilities to change how they operate and manage their resources.") https://www.epa.gov/crwu/resilient-strategies-guide-water-utilities#/resources/646; EPA Memorandum, "Re-Instatement of Federal Flood Risk Management Standard for State Revolving Fund Programs," Thompkins, Anita Maria and Stein, Raffael to Water Division Directors (April, 2022) https://www.epa.gov/dwsrf/federal-flood-risk-management-standard-srf-programs (noting that "[f]looding is one of the most common hazards in the United Stated accounting for roughly $17 billion in damage annually between 2010-1018 according to [FEMA], and it will continue to be an ongoing challenge for water infrastructure" with impacts that "can include physical damage to assets, soil and streambank erosion and contamination of water sources, loss of power and communication, loss of access to facilities, saltwater intrusion, and dangerous conditions for personnel."). See also, National Association of Clean Water Agencies ("NACWA"), "NACWA

In New England, as well as elsewhere throughout the country,[7] storms and flooding have caused damage to, and in some cases total failure of, wastewater treatment systems and sewer systems. Implementing adaptive measures so that a wastewater treatment plant's wastewater infrastructure may withstand increasingly frequent heavy precipitation and major storm and flood events is, therefore, a critical step in a system's maintenance. Additionally, EPA notes that sometimes, mitigation measures based on adaptation/mitigation plans that were at one point sufficient and that were based on historic, local major storm and flood predictions, may now be insufficient given actual experience with major storms and flooding, the emergence of new data that was not previously available, and more recent projections. And while EPA also acknowledges that it may not always be possible to anticipate all future events (i.e., speed or direction of the wind, temperature fluctuations, the uprooting of trees, etc.) that can exacerbate, or alleviate, the outcomes of major storm and flood events, as illustrated in the examples below, it is important to ensure that existing adaptation plans reflect, as best as possible, all relevant data.

Many New England WWTSs have been negatively impacted by major storm and flood events in recent years. In one notable example from Rhode Island in 2010, historically high flood waters (known as "the Great Flood of 2010") severely impacted several wastewater treatment facilities, including the Warwick Rhode Island Wastewater Treatment Facility.[8] After repetitive flood damages to the WWTS, the City of Warwick had constructed a protective berm, or levee, in the mid-1980s to protect the WWTS from future damages. The levee, originally designed for the 100-year flood at that time, plus three feet of freeboard, was breached by repeated heavy rain events in March 2010. The flooding caused catastrophic impacts to the WWTS which led to the "unthinkable" - the decision to evacuate the plant as the Pawtuxet River crested at 20.79 feet.[9] The impact to the treatment plant was extreme:

> While the flood waters caused no structural damages to the facility's tanks or buildings, anything electrical and everything that was not metal or concrete was ruined. It was at least two days before the river had subsided to the point where staff could begin to access the facility.[10]

With a tremendous amount of work and rebuilding, the facility was dewatered, and primary and then secondary treatment were restored. The facility was unable to achieve full compliance

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Principles on Climate Adaptation and Resiliency" (noting that "[f]or many clean water agencies, changing weather patterns have become a management reality and responsibility.") https://www.nacwa.org/docs/default-source/conferences-events/2018-ulc/nacwa-statement-of-principles-on-climate_.pdf?sfvrsn=2

[7] National Association of Clean Water Agencies ("NACWA") Fact Sheet: "10 Extreme Rain and Flood Events in the US – All in 2022" (listing the "top 10 flood events of 2022" and their effects on water infrastructure from across the country, including the devastating impacts that include loss of life, estimated damages in the range of millions to billions of dollars, and extreme impacts to system services.)

[8] Holbrook, Nicolas Q., The Flood Crews of 2010: A History of Rhode Island's 2010 Floods as Told By The State's Wastewater Collection and Treatment Operators, Rhode Island DEM, Office of Water Resources (2017) https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/benviron/water/pdfs/floodcrews2010.pdf

[9] Id. at 13.

[10] Id.

with its permit limits for a period of about 80 days.[11] Due to this flooding, the facility updated their flood protection plans based on local storm and flooding data and implemented improvements for the WWTS, including raising the levee to protect the WWTS from inundation caused by a 500-year flood event.[12]

Figure 1: The flooded Warwick wastewater facility on Wednesday, March 31, 2010. (State of Rhode Island)

More recently, in July 2023, Vermont experienced a major storm and flooding event characterized by the National Weather Service as "catastrophic flash flooding and river flooding" with upwards of three to nine inches of rain falling in 48 hours, an amount that in some places of Vermont, amounted to the "greatest calendar day rainfall "since records began in 1948.[13] According to local reporting, operations at 33 wastewater treatment systems were disrupted, and several facilities, like those in the towns of Ludlow and Johnson, were rendered

[11] Burke, Janine L., Executive Director, Warwick Sewer Authority, "The Great Flood of 2010: A Municipal Response," pg. 237 Journal NEWEA (September 2012) https://www.warwicksewerauthority.com/pdfs/floodmitgation/NEWWA%20Journal%20Article%20on%20WSA%20Flood%20Response.pdf

[12] Preliminary Design Report, Wastewater Treatment Facility Flood Protection and Mitigation Design, Warwick, Rhode Island (Prepared by AECOM for Warwick Sewer Authority, July 12, 2012) https://www.warwicksewerauthority.com/pdfs/floodmitgation/Warwick%20Flood%20Mitigation%20PDR%207-24-12%20with%20Appendices.pdf,; Warwick Wastewater Treatment Facility – Climate Vulnerability Summary https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/benviron/water/pdfs/cvswarwick.pdf

[13] Banacos, Peter, "The Great Vermont Flood of 10-11 July 2023: Preliminary Meteorological Summary" National Oceanic and Atmospheric Administration, National Weather Service, pg. 2 (August 5, 2023) https://www.weather.gov/btv/The-Great-Vermont-Flood-of-10-11-July-2023-Preliminary-Meteorological-Summary (noting that damage "rivaled and in some areas exceeded – Tropical Storm Irene in 2011")

inoperable and will need significant reconstruction.[14] As one news outlet reported about the conditions in Ludlow:

> [t]he facility that keeps the village's drinking water safe was built at elevation and survived. But its sewage plant fared less well. Flooding tore through it, uprooting chunks of road, damaging buildings and sweeping sewage from treatment tanks into the river. Even [over three weeks after the storm event] the plant can only handle half its normal load.[15]

Figure 2: Ludlow Wastewater Treatment Plant (photo August 2, 2023, taken after July storm event) [16]

[14] Robinson, Shaun, "Total Destruction:' Flooding Knocks Out Johnson's Wastewater Plant, Disrupts Operations Elsewhere" (July 18, 2023); https://vtdigger.org/2023/07/18/total-destruction-flooding-knocks-out-johnsons-wastewater-plant-disrupts-operations-elsewhere/ ("Across Vermont, 33 wastewater treatment facilities were impacted by the flooding …according to Michelle Kolb, a supervisor in the state Department of Environmental Conservation's wastewater program.")

[15] Naishadham, Suman, Peterson, Brittany, Fassett, Carnille, "Rising Flood Risks Threaten Many Water and Sewage Treatment Plants Across the US," Vermont Public, https://www.vermontpublic.org/local-news/2023-08-10/ludlow-vermont-rising-flood-risks-threaten-many-water-and-sewage-treatment-plants-across-the-us

[16] https://apnews.com/article/climate-change-flood-risks-infrastructure-vermont-7bd953f513035468ee74f8f7c619bb8e] (picture captions: Joe Gaudiana, the Ludlow, VT. Chief Water and Sewer Operator, left, surveys damage with Elijah Lemieux, of the Vermont Rural Water Association, at the wastewater treatment plant following July flooding, Wednesday, Aug. 2, 2023, in Ludlow. (AP Photo/Charles Krpa))

The wastewater treatment plant in Johnson, Vermont was similarly devastated with the Assistant Plant Manager reporting to a local news outlet, "'Total destruction. The only thing we have left is the shell of a building.'" [17]

According to officials from Vermont DEC, both the Ludlow and Johnson WWTSs had some flood protections in place prior to this event: Ludlow built a new influent pump station designed to withstand a 500-year flood event in 2020-21.[18] While its plant was rendered inoperable immediately after the early July flood, it came back on-line in late July. For the Johnson Wastewater Treatment Plant, this was the 6th flooding event at the plant since it was built in 1995. In the assessment that occurred by state and federal officials after the most recent flood, long-term recommendations ranged from more minor fixes (i.e., replacing the gravity line with a pump station and force main) to undertaking an assessment that would compare the cost of moving the facility against the already-significant cost of just repair and construction, estimated to be at least $2 million.[19] As the officials emphasized, short of relocating, or finding significant additional resources, for some of Vermont's impacted facilities, there are no easy fixes and future adaptations might mean preparing "to-go bags," and installing "redundant pipes," submersible pumps, waterproof electrical boxes or, in some cases, possibly building a second story on an existing plant.

Even more recently, in September 2023 the City of Leominster in central Massachusetts experienced a flash flooding event.[20] Previously, the city had identified a riverbank section of the North Nashua River, near the WWTS, that had eroded and was continuing to be eroded and was heading towards a buried sewer main. As detailed in the summary of work report,[21] "[l]eft unabated, the stream would likely carve a new path into the sewer line, potentially causing a break." To mitigate this potential problem, the city completed a riverbank stabilization project under FEMA's Hazard Mitigation Grant Program to protect the main sewer line that was identified as vulnerable to flooding and failure. That line was unimpacted by the recent flash flooding in September and the stabilization work is still intact while other infrastructure in the area suffered significant flood damages. In addition to illustrating the potential impacts of a recent flooding event on a WWTF, this example - of identifying a risk to increased flooding and consequent mitigation measure - exemplifies the process that EPA envisions for the Adaptation Plan.

EPA acknowledges and appreciates that many WWTSs and sewer systems are currently designed with some flood protections to combat the increasing frequency of major storm and

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[17]Robinson, Shaun, "Total Destruction: "Flooding Knocks Out Johnson's Wastewater Plant, Disrupts Operations Elsewhere" (July 18, 2023); https://vtdigger.org/2023/07/18/total-destruction-flooding-knocks-out-johnsons-wastewater-plant-disrupts-operations-elsewhere/

[18] Telephone conversation with Vermont Department of Conservation officials, Heather Collins and Michelle Kolb (September 25, 2023).

[19] Johnson Village Wastewater Post July 2023 Flood Treatment Plant Assessment Lamoille County, Vermont, NPDES Permit Number Vermont 0100901 (August 9, 2023)

[20] Derrick Bryson Taylor and Johnny Diaz, "Massachusetts Cities Declare Emergency After 'Catastrophic' Flash Flooding" https://www.nytimes.com/2023/09/12/us/leominster-massachusetts-flash-flooding.html

[21] City of Leominster, North Nashua River Riverbank Stabilization Project: Summary of Work (prepared by GZA GeoEnvironmental, Inc.) (February 2023)

flood events and the resulting impacts to wastewater treatment systems and sewer systems. To address the current and future risks associated with these more frequent and intense storms occuring in the region, EPA finds that the development of an Adaptation Plan is necessary in order to ensure the proper operation and maintenance of WWTSs and sewer systems.

B. Requirement to Develop an Adaptation Plan

To support the Permittee's[22] development of an Adaptation Plan, EPA Region 1 has developed a companion document: *Recommended Procedures and Resources for the Development of Adaptation Plans* ("Recommended Procedures")[23] to assist owners and operators of wastewater treatment systems and/or sewer systems to develop adaptation plans that meet the requirements included in Region 1 NPDES permits. The document provides recommendations and procedures for the use of a free EPA tool developed specifically for water utilities. Permittees may use the recommended tool and the associated procedures, or they may use other approaches providing comparable analyses, as discussed in more detail below, to satisfy permit requirements.

In the permit, the three components of the Adaptation Plan include the following (additional detail, including definitions of certain terms, is included in the permit):

- Component #1: Requires the Permittee to develop and sign, within 24 months of the effective date of the permit, an identification of critical assets and related operations within the WWTS and/or sewer system which they own and/or operate that are most vulnerable to major storm and flood events under baseline and future conditions and to assess the ability of each to function properly in the event of major storm and flood events in terms of effluent flow, sewer flow, and discharges of pollutants;

- Component #2: Requires the Permittee to develop and sign, within 36 months of the effective date of the permit, an assessment of adaptive measures, and/or, if appropriate, the combination of adaptative measures that minimize the impact of future conditions on the critical assets and related operations of the WWTS and/or sewer system(s); and

- Component #3: Requires the Permittee to submit a summary of the work completed in Components #1 and #2 with a proposed schedule for implementation and maintenance of adaptive measures within 48 months of the effective date of the permit.

The rationale for specific revisions and definitions is provided in more detail below.

- The permit requires the Permittee to develop an implementation schedule rather than specify a particular schedule for implementation. EPA notes that the permit also

[22] For brevity, this document refers to "Permittee" throughout; however, this reference also includes all "Co-Permittee(s)" subject to the applicable permit requirements.
[23] Available at: https://www.epa.gov/npdes-permits/npdes-water-permit-program-new-england

requires that the Permittee report annually on "any progress made toward implementation of adaptive measures." This leaves the Permittee free to evaluate other considerations when determining when and how to implement adaptive measures. EPA encourages Permittees to move forward with implementation actions that address the vulnerabilities identified as part of its Adaptation Plan in as timely a manner as possible and to prioritize addressing the most impactful vulnerabilities.[24]

- Permittees who wish to comply with this permit requirement through prior assessments must explain how its prior assessments specifically meet the requirements of the permit. The permit allows such assessments that were undertaken in the last 5 years to be used, as long as they meet certain conditions specified in the permit.

- EPA uses certain minimum standards (e.g., use of FEMA Flood Standards) and other terminology that is defined in and consistent with the federal flood standards, to ensure eligibility for federal funding as well as SRF funding.[25] The permit requires that the Permittee evaluate asset vulnerability using "baseline conditions" and "future conditions." The permit defines baseline conditions as the 100-year flood based on historical records and future conditions as projected flood elevations using one of two approaches consistent with the federal flood standards.

  This clearly defines what minimum conditions must be used to assess vulnerability under the Adaptation Plan, and EPA has provided tools and data references a Permittee may use to evaluate these conditions and meet the permit requirements. The flood elevations specified account for many of the storm and flood conditions; however, EPA notes that these data may not account for all potential instances of extreme precipitation. Currently, data sets or mapping tools that model changes to flood elevations in response to varying storm sizes are not readily available or simple to use. Therefore, EPA is not requiring facilities to identify or use such data in their analysis. However, EPA notes that there may be site-specific data available for use in a given municipality, and EPA encourages facilities to consider impacts from site-specific events for planning purposes if possible. One or more of the resources provided in the Recommended Procedures document, referenced above, may also account for impacts of extreme precipitation to an extent that is useful to facilities.

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[24] EPA notes that there are many aspects involved in addressing adaptation planning and associated implementation measures, including regional considerations and that region-wide planning is appropriate. Permittees are encouraged to engage in regional planning and EPA understands this may impact proposed schedules for implementation measures. EPA expects, however, that for most Permittees there will be many implementation measures that do not require regional planning or collaboration. To the extent this is not the case, the Permittee may document its analysis supporting such a conclusion and base its implementation schedule accordingly.

[25] "Re-Instatement of Federal Flood Risk Management Standard for State Revolving Fund Programs," Thompkins, Anita Maria and Stein, Raffael to Water Division Directors (April, 2022) https://www.epa.gov/dwsrf/federal-flood-risk-management-standard-srf-programs

- The permit requires evaluating the vulnerability of assets once during the permit term (during the development of the Adaptation Plan). Additional revisions of the Adaptation Plan during the permit term would only be required during the permit term if there has been a significant change to the infrastructure of the system to update the description of the assets removed or updated, to incorporate any new assets into the documentation, and describe any effects these changes have on the asset and/or system vulnerability.

- In light of security concerns posed by the public release of information regarding vulnerabilities to wastewater infrastructure, Permittees are not required to submit Component 1 and 2 and instead must keep that documentation on file and available for inspection or review by EPA upon request. In all other submittals (Component 3 and future annual reports), the Permittee shall provide information only at a level of generality that indicates the overall nature of the vulnerability but omitting specific information regarding such vulnerability that could pose a security risk.

- Regarding timing, EPA considers that the permit allows adequate time to initiate the necessary funding and procurement processes (which EPA understands must line-up with local requirements which can take place over many months or even years) in order to develop the plans (either in-house or through professional engineering services) without significantly impacting other ongoing municipal projects.

- Regarding annual reporting, the first report is due on March 31 following the completion of Component 1 of the Adaptation Plan. As described above, flood and major storm events are a significant threat to water quality. An annual reporting requirement is therefore appropriate to facilitate Adaptation Planning and, ideally, the implementation of an Adaptation Plan occurring as promptly and as efficiently as possible.

- Regarding the cost of developing the Adaptation Plan, there are costs and other resources that Permittees must allocate to comply with all permit requirements. EPA considers proper operation and maintenance of the WWTS as well as the collection system to include addressing major storm and flood events that would impair operation of the system. EPA acknowledges that the Permittee will incur costs and other potential resource expenditures to develop a plan related to these events but considers these expenditures to be necessary in order to prevent impacts during such events (e.g., bypass, upset or failure of the WWTS, overflow, or increased inflow and infiltration in the sewer system, and discharges of pollutants that exceed effluent limits), which would adversely affect human health or the environment.

  However, EPA appreciates the regulated community's concerns regarding costs as described below.

1. In order to minimize costs and provide additional clarity to Permittees, EPA has developed a companion document, *Recommended Procedures and Resources for the Development of Adaptation Plans for Wastewater Treatment Systems and/or Sewer Systems,* ("Recommended Procedures"), which a Permittee could elect to use to guide it through development of the Adaptation Plan. The document instructs Permittees on the use of EPA's CREAT tool, which is free to use by Permittees and will help Permittees navigate through much of the analysis needed to develop an Adaptation Plan. It is EPA's intention that a Permittee could use these tools to develop an Adaptation Plan in an effort to reduce costs and possibly to eliminate or reduce the need to hire external contractors.

2. As mentioned above, the permit that allows credit for prior work to eliminate potentially costly duplication of efforts.

3. It is EPA's intention to provide Permittees with technical assistance for the development of the Adaptation Plan. EPA has many on-line training tools, [26] some of which have been utilized by New England WWTSs[27] and EPA offered a New England-based virtual workshop training series for WWTS operators and others on the use of the CREAT tool. The training took place in March 2024 and was recorded to maximize its utility for those who may want to access the information at a later date.[28] EPA also plans to offer ongoing technical assistance on the use of the CREAT tool. In recommending Permittees use this tool and by providing procedures for using it, EPA hopes to both enable Permittees to develop robust Adaptation Plans themselves, but also to reduce the costs, including the costs associated with outside contractors.

4. Additionally, EPA notes that there may be federal, state or local funding sources available to assist entities with adaptation planning.[29]

- With regards to the cost of implementing adaptation measures, the selection and deadlines for implementing specific adaptation measures are not included as requirements in the permit since those will only be known after the completion of the Adaptation Plan. EPA expects that the Permittee will begin implementation of those measures in the coming years. However, since the Permittee will be setting the prioritizations and scheduling for implementing the measures based on their own risks

[26] https://www.epa.gov/crwu/training-and-engagement-center; see also, the Resources Section in the Recommended Procedures for additional resources that Permittees might find useful.
[27] See https://toolkit.climate.gov/sites/default/files/Manchester-by-the-Sea_March_2016.pdf;]; see also, the Resources Section of the Recommended Procedures document for more New England case studies and other useful resources.
[28] The training recordings will soon be available on EPA's website at: https://www.epa.gov/npdes-permits/npdes-water-permit-program-new-england.
[29] See EPA's website for Federal Funding for Water and Wastewater Utilities in National Disasters (Fed FUNDS). https://www.epa.gov/fedfunds. Potential resources may also be available through the State.

and vulnerabilities to major storm and flood events, they may incorporate affordability and funding availability into their considerations.

EPA notes, that in developing the Adaptation Plan, the Permittee may, as part of the process, be comparing the potential economic costs of the baseline condition, or "no action alternative," with those of possible adaptation measures, under current and predicted risks of major storm and flood events. This option is available in the use of the adaptation planning approach as outlined in the companion document to this permit entitled *Recommended Procedures and Resources for the Development of Adaptation Plans for Wastewater Treatment Systems and/or Sewer Systems.*[30] Depending on site-specific circumstances, the Permittee may find that the cost of <u>not</u> implementing adaptation measures is greater than the cost of implementing them.

C. Legal Authority

The Adaptation Plan permit conditions are necessary to further the overarching goal of the CWA[31] "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters" and derive from the same authorities as all other standard operation and maintenance requirements. CWA § 101(a), 40 C.F.R. §§ 122.41(d), (e), (n). The Adaptation Plan requirements are an iterative update to EPA's standard O&M permit provisions and intend to address serious and increasingly prevalent threats to Permittees' compliance with permit effluent limitations. As illustrated by the recent examples detailed in Section A, major storm and flood events can gravely impact discharges from WWTSs and thus water quality. That is, plant and/or sewer system failure due to storms, increased precipitation/floods, storm surge, and sea level rise can and do lead to bypasses, upsets, and violations of some or all of the permit limits, including water quality-based limits and limits based on secondary treatment standards. The Adaptation Plan is designed to reduce and/or eliminate noncompliant discharges that result from impacts of major storm or flood events through advanced planning and adaptation measures and is authorized by both EPA regulations and the CWA.

EPA recognizes that larger scale planning may be necessary to address some issues and that requiring the same would be beyond the scope of this NPDES permit. This NPDES permit does not intend to address all issues caused by major storm and flood events. To the contrary, the Adaptation Plan O&M requirements intend to address one specific issue that EPA has witnessed in New England, as described in Section A: the operability of the WWTS and/or sewer system during and after major storm and flood events. This issue is appropriate for an NPDES permit

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[30] Available at: https://www.epa.gov/npdes-permits/npdes-water-permit-program-new-england

[31] Congress has recently expressly affirmed that natural hazard adaptation measures for POTWs appropriately fall within the scope of the CWA: Congress added section 223 to the CWA via the Infrastructure Investment and Jobs Act, creating a grant program to support, *inter alia*, "the modification or relocation of an existing publicly owned treatment works, conveyance, or discharge system component that is at risk of being significantly impaired or damaged by a natural hazard[ ]." Pub. L. 117-58, 135 Stat. 1162 (codified at 33 U.S.C. § 1302a(c)(4))(2021).

because it is central to the Permittee's compliance with the Permit's effluent limitations and other Permit conditions, and thus central to EPA's obligation to issue permits that assure compliance with Water Quality Standards and other applicable laws. For the reasons described in this Section, EPA is well within its CWA-based authority to impose the Adaptation Plan requirements.

EPA's O&M regulations authorize EPA to impose the Adaptation Plan requirement. 40 C.F.R. § 122.41(e) ("Proper operation and maintenance. The Permittee shall at all times properly 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 this permit.") Proper operation and maintenance of the permitted facilities and systems inherently includes adaptation planning. As illustrated in the examples in Section A, if a WWTS is unable to operate properly as designed due to impacts from a major storm or flood event, the discharge of pollutants in violation of both its permit and applicable water quality standards is highly likely to occur and with increasing frequency. In other words, the Permittee cannot satisfy its obligation to operate properly "at all times" if it cannot do so during and after major storms or flooding events. The new Adaptation Plan requirements are an iterative extension of the previous permit's requirements that "The permittee will maintain an ongoing preventative maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure." Major storm and flood events represent an increasing cause of WWTS malfunctions and failures and thus EPA added the Adaptation Plan requirements to the O&M requirements to more specifically address this issue.

EPA is well within its CWA-based authority to include these permit conditions which are necessary to reduce the frequency or likelihood of bypass or upset and otherwise achieve compliance with the permit's effluent limits, and thus also assure compliance with water quality standards and other CWA requirements. CWA § 402(a)(2) ("[EPA] shall prescribe conditions for [NPDES] permits to assure compliance with the [applicable CWA] requirements…as he deems appropriate."); CWA §§ 301(b)(1)(C), 401(a)(1)-(2); *see also* 40 C.F.R. § 122.4(d) ("No permit may be issued… When the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States"); *See also* 40 C.F.R. § 122.44(d)(1). The provisions are reasonable measures rooted in the permitting requirements to properly operate and maintain all facilities and the duty to take all reasonable steps to minimize or prevent any discharge in violation of the permit. 40 C.F.R. § 122.41(d), (e).

The Agency relied on the same CWA-based authority when it promulgated the O&M regulations:

> Many commenters expressed doubt whether EPA is legally authorized to require proper operation and maintenance of facilities. This requirement is clearly authorized for NPDES permittees by section 402(a)(2) of CWA which requires the Administrator to prescribe permit conditions which will assure compliance with the requirements of CWA section 402(a)(1).

45 Fed. Reg. 33290, 33303-04 (May 19, 1980). In 1980 and now, the proper operation and maintenance of a facility – including the Adaptation Plan requirements – effectuates the permit

limits on all addressed pollutants and protects all applicable water quality standards, as they assure that such limits will be met, even in times of major storms or during flood events. CWA § 402(a)(2). It is well-established that EPA may include specific permit conditions that ensure the preconditions or assumptions underlying EPA's pollutant effluent flow calculations remain constant, thus ensuring the permit, as a whole, assures compliance with WQS and other applicable CWA requirements. *See In re: City of Lowell,* 2020 WL 3629979 at *35,18 E.A.D. 115, 156 (EAB 2020) (affirming effluent flow limit as a proper exercise of the Agency's 40 C.F.R. § 122.41(e) authority in part on the basis that the permit's pollutant effluent limits were calculated based on a presumed maximum wastewater effluent discharge from the facility, and thus "If flow limits exceed the assumed maximum flow, … then the Region may have erroneously concluded that a pollutant did not have a reasonable potential to cause or contribute to an exceedance of water quality standards or that the permit's pollutant effluent limits assure compliance with Massachusetts' water quality standards.") Likewise, the Adaptive Plan O&M requirements ensure the basic, necessary preconditions (i.e., the plant's operability) to compliance with the permit's effluent limits and other requirements of the CWA. Given the importance of WWTS and sewer system operability to compliance with this NPDES permit, it is not unreasonable for EPA to impose the Adaptation Plan O&M requirements. *C.f. In re Avon Custom Mixing Services, Inc.*, 17 E.A.D. 700, 709 (EAB 2002) ("Given the importance of monitoring to the integrity of NPDES permits, and the broad authority the CWA confers on the Region to impose monitoring requirements in NPDES permits, it does not strike us as unreasonable that the Region has decided to include new monitoring requirements in the reissued permit.")

The EAB has affirmed the Agency's authority to require the preparation and submission of a plan as part of the Operation & Maintenance requirements of an NPDES permit. *In Re City of Moscow, Idaho*, 10 E.A.D. 135, 169-172 (EAB 2001) (affirming O&M permit provision that required development and submission of a quality assurance project plan,"[t]he primary purpose of [which] shall be to assist in planning for the collection and analysis of samples in support of the permit…"[32] under the O&M regulations, stating "it seems plain that the CWA and its implementing regulations authorize the Region to include permit requirements like the QAPP here in conjunction with the ultimate goal of assuring compliance with the CWA."). Like the O&M planning requirement in *Moscow,* the primary purpose of the Adaptation Plan in this permit is to assist in planning for compliance with the permit – in this instance, by ensuring the facility remains operable even during flooding or other major storm events – and the ultimate goal of the requirement is to assure compliance with the CWA.

40 C.F.R. § 122.41(d) also authorizes EPA to impose the Adaptation Plan requirement. ("Duty to mitigate. The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.") It is a reasonable step for EPA to require a Permittee to create an Adaptation Plan to minimize facility disruptions during major storm and flood events. For example, if a Permittee identifies that an asset critical to its WWTS is

[32] NPDES Permit issued to City of Moscow, Idaho, Part I.E (March 12, 1999) (available at: https://www2.deq.idaho.gov/admin/LEIA/api/document/download/15509)

extremely vulnerable to a major storm and that loss of the asset would result in the inoperability of the WWTS and thus discharges in violation of permit limits, then mitigating those risks reasonably minimizes or prevents harmful discharges in violation of the permit.

EPA also has broad authority for data and information collection, reporting, and "such other requirements as [the delegated permit authority] deems appropriate" to carry out the objectives of the Act." CWA § 402(a)(2). *See also In re Moscow*, 10 E.A.D. at 171. Components 1 and 2 of the Adaptation Plan require the Permittee to collect and report to EPA data and information that are appropriate to carry out the objectives of the CWA. This information and data will allow the Permittee to identify assets which are vulnerable to flooding and adaptive measures appropriate to address those vulnerabilities. As described elsewhere in this Appendix, facility vulnerabilities threaten compliance with permit requirements and thus CWA objectives. Conversely, information about appropriate adaptive measures will facilitate compliance with both.

EPA notes that although the CWA limits the terms of NPDES permits to five years, CWA § 402(b)(1)(B), such a limitation does not logically constrain the permitting authority from requiring the Permittee to consider future conditions beyond the five-year term. EPA expects Permittees to fully comply with the Adaptation Plan provision within the five-year term of the permit, meaning it does not impose any obligations on the Permittee beyond the five-year permit term. One directly relevant example for WWTSs are Combined Sewer Overflow Long-Term Control Plans (LTCPs). The CSO Policy, 59 Fed. Reg. 18688 (April 19, 1994), which Congress expressly incorporated directly into the CWA at § 402(q), requires the development of LTCPs to ultimately come into compliance with the Act, recognizing that such schedules will (and have) in many instances span multiple permit terms. That Congress directly amended the CWA to require compliance with the CSO Policy, including its long-term permitting approaches, demonstrates that the Act does not constrain permitting authorities from considering timeframes outside of the five-year permit term. Another example of permissible permit timeframes that extend beyond the five-year permit term are compliance schedules, which may go beyond the expiration date of the permit if consistent with applicable state law. *See In Re Moscow,* 10 E.A.D. at 153 ("…a Region's authority to provide for compliance schedules in EPA-issued permits is limited to those circumstances in which the State's water quality standards or its implementing regulations 'can be fairly construed as authorizing a schedule of compliance.'") (citations omitted). The WWTS Adaptation Plan reasonably also requires *consideration* of long-term horizons as the planning and actions needed to address increasing major storms and flood events will be in many instances long-term as well.

Further, EPA does not consider the expected life or design life the appropriate recurrence interval to evaluate future risks. Namely, while a particular facility can be designed initially for an expected period of operation and the design storm at a given point in time, material changes often occur over time to operate and maintain a facility, thus extending its design life, and with the impacts of increased severity and frequency of major storm and flood events, the original design storm may no longer represent likely discharge conditions. EPA asserts that a forward-looking evaluation of the risks to a facility relative to its current operational state is important

to selection and implementation of the control measures necessary to minimize discharges that result from impacts of major storm and flood events.

EPA acknowledges that there are many possible approaches and that there are other programs that require resiliency planning. However, because adaptation planning is a critical step in complying with the permit's effluent limitations, EPA has determined that it is appropriate to include the Adaptation Plan requirements in the permit itself even if similar requirements also derive from other obligations. Major storm and flood events are of urgent concern, and EPA does not believe it would be sufficient to rely entirely on non-Permit obligations to address these threats to the proper operation and maintenance of WWTSs and/or sewer systems, especially because not all Permittees may otherwise be obligated to engage in adaptation planning, or may not be required to do so at this time. EPA has determined that planning for major storm and flood events must be done by all facilities now to avoid negative impacts. In recognition of the fact that Permittees may complete similar assessments to satisfy other obligations, the permit allows the Permittee to use qualifying assessments done for other programs or obligations to satisfy some or all of the components of the Adaptation Plan requirements. EPA considers its approach to be appropriate and reasonable to ensure consistent operation and maintenance of permitted facilities. Therefore, EPA will require Adaptation Plans be developed under NPDES permits for all wastewater treatment plants in Massachusetts and New Hampshire as well as those issued by EPA in Maine.

EASTPORT - MAIN WASTEWATER TREATMENT FACILITY PUBLICLY OWNED TREATMENT WORKS, APPLICATION FOR SECTION 301(h) TO VARIANCE FROM THE SECONDARY TREATMENT REQUIREMENTS OF THE CLEAN WATER ACT	)))))))	TENTATIVE DECISION OF THE REGIONAL ADMINISTRATOR PURSUANT 40 C.F.R. PART 125, SUBPART G

Eastport (Eastport or permittee), is a publicly owned treatment works located in the Eastport, Maine. Eastport, is a publicly owned treatment works located in the Town 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 or Region 1) 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 wastewater generated by residential homes within the City of Eastport. 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 14, 1984, and most recently renewed on March 21, 2019. It is my tentative decision that Eastport be granted a renewal of the variance in accordance with the terms, conditions, and limitations of the attached decision document. This determination is subject to concurrence by the State of Maine as required by Section 301(h) of the Act. Region 1 has prepared a draft NPDES permit in accordance with this decision.

Because my decision is based on available evidence specific to this 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 based on subsequently acquired information relating to the impacts of the less-than-secondary treated effluent on the marine environment.

Pursuant to the procedures of the NPDES Permit Regulations, 40 C.F.R. § 124, a public notice will be issued which describes the comment procedures that are available to interested persons regarding this decision and the accompanying draft NPDES permit.

Date: _____

_____

David Cash,
Regional Administrator
Environmental Protection Agency
Region 1

TENTATIVE DECISION DOCUMENT

ANALYSIS OF THE APPLICATION FOR A SECTION 301(h)

SECONDARY TREATMENT VARIANCE

FOR

CITY OF EASTPORT

MAIN WASTEWATER TREATMENT PLANT

ENVIRONMENTAL PROTECTION AGENCY
REGION 1 - NEW ENGLAND

October 2024

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LIST OF ABBREVIATIONS

BIP .....Balanced Indigenous Population
BOD_5.....Biochemical Oxygen Demand
CWA.....Clean Water Act
CZM .....Coastal Zone Management
DMR .....Discharge Monitoring Report
DO .....Dissolved Oxygen
EPA .....Environmental Protection Agency
gpd .....gallons per day
MEDEP.....Maine Department of Environmental Protection
MEDMR……. Maine Department of Marine Resources
MGD .....million gallons per day
M.R.S…….Maine Revised Statute
WQS .....Surface Water Quality Standards
NPDES.....National Pollutant Discharge Elimination System
SCUBA .....Self-Contained Underwater Breathing Apparatus
TSD .....Amended 301(h) Technical Support Document (1994)
TSS.....Total Suspended Solids
WET .....Whole Effluent Toxicity
WQA .....Water Quality Act
WQS .....Water Quality Standards
ZID .....Zone of Initial Dilution

I. SUMMARY

The applicant, the City of Eastport or permittee) is seeking a variance from secondary treatment requirements for a monthly average flow of up to 850,000 gallons per day (gpd) of wastewater from its wastewater treatment plant. The treatment plant is located in the Eastport, Maine and discharges its effluent to Passamaquoddy Bay, a Class SC waterway as classified by 38 Maine Revised Statutes (M.R.S.) § 469. See Figure 1 of the Fact Sheet for a location map.

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 1994 document entitled "301(h) Facilities in Maine, Determining the Necessary Scope of Study for Assurance of Environmental Protection," prepared by the Maine Department of Environmental Protection (MEDEP or the Department)[1], as well as monthly compliance data generated by Eastport in accordance with the terms and conditions of its NPDES Permit/Maine Waste Discharge License for the period from 2019 through 2024.

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 a monthly average of 30 percent (%) removal rate of five-day biochemical oxygen demanding (BOD_5) 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, 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.

II. INTRODUCTION

Eastport 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 Environmental Protection Agency (EPA), Region 1 with regards 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 C.F.R. § 125, Subpart G to Eastport's discharge.

[1] MEDEP, *301(h) Facilities in Maine, Determining the Necessary Scope of Study for Assurance of Environmental Protection*, October 27, 1994.

The applicant's most recent combined EPA Permit and Maine State License expired on March 19, 2024. Eastport applied for a renewal of its Section 301(h) variance on February 7, 2024. The expired permit remains in effect under the provisions of 40 C.F.R. § 122.6.

EPA applied the criteria established in 40 C.F.R. § 125, Subpart G, "Criteria for Modifying the Secondary Treatment Requirements under Section 301(h) of the Clean Water Act," in acting on this request.

III. DESCRIPTION OF TREATMENT FACILITY

Sanitary wastewaters received at the treatment facility are generated by residential and commercial entities in the City of Eastport. The facility receives no flow from industrial sources. All CSOs have been eliminated from the collection system. The wastewater collection system consists of 10 miles of interceptor and collector sewers and six (6) submersible pump stations. The collection system has been upgraded over time and the newer sewer lines have reduced the quantity of infiltration and inflow (I&I). The collection system consists of a triplex submersible pump station at Middle Street, 2,400 linear feet of 10-inch diameter force main to the treatment plant and 3,200 feet of gravity outfall sewer to Passamaquoddy Bay. The Middle Street pump station includes a bar rack, gas detection system, wet well, pumps and piping, valve pit, control panel and stand-by emergency generator (housed in a building).

The city treatment facility provides a primary level of treatment and consists of: (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.

IV. DESCRIPTION OF RECEIVING WATER

Outer Cobscook Bay/Passamaquoddy Bay at the point of discharge is a marine water subject to tidal action with a difference in tides (mean high to mean low) of up to 19 feet with very strong currents[2]. Maine law, 38 M.R.S. § 469 classifies the receiving waters at the point of discharge as Class SC waters. Maine law, 38 M.R.S., § 465-B(3) contains the classification standards for Class SC waters.

Eastport's wastewater treatment facility discharges to a shellfish harvesting closure area that the Maine Department of Marine Resources (MEDMR) has designated as shellfish Area 59: "Eastport: inside (shoreward) of a line beginning at the easternmost point of land on Harris Point then running east to the south tip of Dog Island; then running southeast to Nav. Aid G "3" on Clark Ledge and

[2] National Oceanographic and Atmospheric Agency, Tides & Currents website: Phys. Oceanography Eastport, ME - Station ID: 8410140.

then running southeast to the east tip of Todd Head; then southeast to the US Canadian international border and then following the international boundary south to a point due east from the south tip of Estes Head: than running due west to the tip of Estes and then northwest to the south tip of Shackford Head."

V. PHYSICAL CHARACTERISTICS OF THE DISCHARGE

A. Dilution Factors

Pursuant to 40 C.F.R. § 125.62(a), the outfall and diffuser (if applicable) must be located and designed to provide adequate initial dilution, dispersion, and transport of wastewater 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.

Treated effluent is discharged to Passamaquoddy Bay at high tide via a 24-inch diameter outfall pipe. The outfall pipe extends approximately 500 feet offshore. At mean low tide, approximately 9 feet of water covers the crown of the pipe.

MEDEP Rule 06-096 CMR, Chapter 530, Surface Water Toxics Control Program, § 4(A)(2) states:

(2) 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.

(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.

With the current outfall location, 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

The effluent is less dense than sea water and flows quickly to the surface and spreads out. Strong lateral currents, significant tidal ranges (19+ feet), and wave action provide rapid mixing.

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

VI. APPLICATION OF STATUTORY AND REGULATORY CRITERIA

A. Primary or Equivalent Treatment Requirements

[Section 301(h) of the Clean Water Act, 40 C.F.R. § 125.57, 40 C.F.R. § 125.58(r) and 40 C.F.R. § 125.60]

Section 301(h) of the Clean Water Act requires that an applicant for a 301(h) waiver of secondary treatment must demonstrate, among other things, that that the discharger will be discharging effluent that has received at least primary or equivalent treatment.

Section 301(h)(9) defines primary or equivalent treatment as "screening, sedimentation and skimming adequate to remove at least 30 percent of the biological oxygen demanding material and of the suspended solids in the treatment works influent, and disinfection, where appropriate." (See also 40 C.F.R. §§ 125.57, 125.58(r) and 125.60). It is noted that MEDEP's definition of primary treatment differs from the federal definition, in that it requires 50% removal of total suspended solids (TSS).

The permit has flow limits, concentration and mass limitations for BOD_5 and TSS, as well as limits for fecal coliform, enterococci bacteria, pH, and total residual chlorine. See the Fact Sheet for an explanation of the limits derivation. See Fact Sheet, Appendix A for a summary of Discharge Monitoring Report data for the period from July 2019 through June 2024. During these 60 months, the facility had two violations of BOD_5 (monthly average concentration and monthly average minimum removal), one daily maximum total residual chlorine violation, one daily maximum enterococci violation, one monthly average fecal coliform violation and three daily maximum fecal coliform violations.

B. Existence of and Compliance with Applicable Water Quality Standards [40 C.F.R. § 125.61]

40 C.F.R. § 125.61(a) specifies that there must be a water quality standard applicable to each pollutant for which a modification is requested, specifically biochemical oxygen demand (or dissolved oxygen), total suspended solids, and pH. The applicant must: (1) demonstrate that the modified discharge will comply with such water quality standards 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 C.F.R. §§ 125.61(b)(1) and (2)).

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

> *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.*

Specific Maine water quality criteria related to DO, TSS and pH are discussed below:

1. **Dissolved Oxygen (DO) [40 C.F.R. § 125.61(a)(1)]**

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

EPA finds that there is no reasonable potential for the discharge to cause or contribute to a violation of the Maine DO criteria due to the available dilution as well as technology-based BOD_5 effluent limits which control the amount of oxygen consuming organic matter discharged from the Facility. The largely buoyant freshwater discharge from the outfall quickly rises to the surface. Strong currents quickly dilute and disperse the effluent (See more in the following Section). The ability of treated effluent to depress ambient DO levels is not immediate. H. W. Streeter and Earle B. Phelps developed the DO sag equation, which demonstrates that the effects of effluent biochemical oxygen demand occur over time. The rapid dilution ensures that oxygen demanding effluent is thoroughly dispersed well before it has time to depress ambient DO. EPA has no evidence of any deficiencies in dissolved oxygen in proximity to Eastport and as such, the discharge complies with 40 C.F.R. § 125.57(a)(2). This is consistent with findings from the 2012 State of the Gulf of Maine Report - Eutrophication, which reported that there are no major problems with dissolved oxygen in the open ocean, non-estuarine portions of the Gulf of Maine.[3]

2. **Suspended Solids [40 C.F.R. § 125.61(a)(2)]**

The Maine water quality standards do not include numeric criteria for suspended solids, but narrative criteria are included in Title 38 of Maine Law at:

> 38 M.R.S. § 464(4)(A)(4), which states that: *…the department may not issue a water discharge license for any of the following discharges: …Discharge of pollutants to waters of the State that imparts color, taste, turbidity (emphasis added) toxicity, radioactivity or other properties that cause those waters to be unsuitable for the designated uses and characteristics ascribed to their class, and,*

[3] Liebman, M. et. al. *State of the Gulf of Maine Report – Eutrophication,* page 12-13, June 2012 available at http://www.gulfofmaine.org/2/wp-content/uploads/2014/03/eutrophication.pdf.

38 M.R.S. § 464(4)(B), which states that: *All surface waters of the State shall be free of settled substances which alter the physical or chemical nature of bottom material and of floating substances, except as naturally occur, which impair the characteristics and designated uses ascribed to their class.*

Rather than settling near the outfall, buoyant effluent rises toward the surface and is greatly dispersed. The Fact Sheet includes an explanation and the supporting science showing there is no concentrated deposition of settable solids in the vicinity of the outfall as a result of the permitted discharge.

The proposed permit requires effluent monitoring of suspended solids to determine compliance with technology-based requirements. Such monitoring will provide additional confirmation that this discharge is consistent with water quality.

3. pH [40 C.F.R. § 125.61(a)(3)]

Maine law 38 M.R.S. § 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 current NPDES permit established a technology-based pH range limit of 6.0 –9.0 standard units pursuant to Department rule, 06-096 CMR Ch. 525(3)(III)(c), see also 40 C.F.R. § 133.102(4)(c). It is expected that, with the available rapid mixing and dilution in the vicinity of the outfall, the technology-based pH effluent limits will ensure that the marine pH criteria will be met in the receiving water. The monitoring frequency is once per week.

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

1. Physical Characteristics of Discharge – Attainment of Water Quality Standards [40 C.F.R. § 125.62(a)(i-iii)]

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

In order to ensure attainment of water quality standards, the permit includes water quality-based limits on fecal coliform, enterococci bacteria, and total residual chlorine.

The applicable Maine Water Quality Standards for these pollutants (see Maine law 38 M.R.S. §§ 465-B(3)(B), (C)) are:

Between April 15th and October 31st, the number of enterococcus bacteria in these waters may not exceed a geometric mean of 14 CFU per 100 milliliters in any 90-day interval or 94 CFU per 100 milliliters in more than 10% of the samples in any 90-day interval. The number 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.

Maine law 38 M.R.S., § 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. Total residual chlorine is the only known toxic constituent in the effluent. It is regulated to ensure there is no discharge of toxic pollutants in toxic amounts.

EPA also reviewed available information and determined that there are no other pollutants in the discharge that would cause, have the reasonable potential to cause, or contribute to exceedances of state water quality standards pursuant to 40 C.F.R. § 122.44(d).

a) Fecal Coliform

Maine law 38 M.R.S. § 465-B(3)(C) 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 current permit established monthly average (geometric mean) and daily maximum limits of 15 cfu/100 ml and 50 cfu/100 ml respectively. The Draft Permit limits are the current National Shellfish Sanitation Program limits for Fecal coliform, with a monthly average (geometric mean) and daily maximum limits of 14 cfu/100 ml and 31 cfu/100 ml respectively. The monitoring frequency is 1/week.

As discussed previously, the waters of Passamaquoddy Bay on the West side of Eastport where the outfall is located is closed to shellfishing by order of the Maine Department of Marine Resources (MEDMR). However, the closure is not due to bacteria discharged from the treatment plant. The permittee's compliance with its bacteria limits to date and small plant flow support the conclusion that the treatment plant's discharge does not cause or contribute to a violation of water quality standards.

b) Enterococcus

Maine water quality standards use enterococci as indicator organisms for protection of estuarine and marine recreational waters. Because contact recreation occurs largely in the summer months, the enterococci criteria are applied seasonally. (38 M.R.S. § 465-B(3)(B)).

The 2019 Permit includes enterococci limits based on the reasonable potential of the treated effluent to cause or contribute to an exceedance of the state bacterial water quality standards.

The enterococcus limits carried forward in the Draft Permit are a monthly geometric mean of 14 cfu/100 ml and a maximum daily limit of 94 cfu/100 ml. The monitoring frequency shall be weekly.

c) Total Residual Chlorine

Maine law 38 M.R.S. § 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. There are no pollutants discharged from the Eastport facility in toxic amounts.

Limits on TRC are specified to ensure attainment of the ambient water quality criteria for chlorine and that best practicable treatment (State BPT) technology is utilized to abate the discharge of chlorine. Permits issued by the EPA impose the more stringent of the calculated water quality-based or technology-based limits. The water quality based monthly average TRC limit of 0.18 mg/l is lower that the BPT limit of 1.0 mg/l. Due to the high dilution the maximum daily technology-based effluent limit of 1.0 mg/l is more stringent than the water quality-based effluent limit and has been proposed in the draft permit.

To meet the water quality-based limits calculated above, the permittee must dechlorinate the effluent prior to discharge.

2. Impact of the Discharge on Public Water Supplies [40 C.F.R. § 125.62(b)]

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 near the Eastport discharge location.

3. Biological Impact of Discharge [40 C.F.R. § 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 C.F.R. § 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 C.F.R. §§ 125.62(c)(2)(i), (ii)). 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 of initial dilution. [40 C.F.R. § 125.62(c)(3)]

See the discussion in Section VI.(C)(7)(a) of this document. The area at the point of discharge is indistinguishable from control areas supporting a BIP of fish, shellfish, and wildlife.

4. Impact of Discharge on Recreational Activities (40 C.F.R. § 125.62(d))

The discharge must allow for the attainment or maintenance of water quality that allows for recreational activities beyond the zone of initial dilution, including, without limitation, swimming, diving, boating, fishing and picnicking, and sports activities along shorelines and beaches. (40 C.F.R. § 125.62(d)(1)).

The draft permit has enterococci bacteria limits. Maine water quality standards use enterococci as indicator organisms for protection of estuarine and marine recreational waters (38 M.R.S. § 465-B(3)(B)). Because contact recreation occurs largely in the summer months, the enterococci criteria are applied seasonally, from April 15th through October 31st.

5. Additional requirements for applications based on improved or altered discharges [40 C.F.R. § 125.62(e)]

The effluent volume, characteristics, and discharge location are unchanged, so it is not an improved or altered discharge.

6. Stressed Waters [40 C.F.R. § 125.62(f)]

This section requires that in determining compliance with the above-mentioned sections, that the assessment of the permittee's modified discharge take into account "pollutants from other sources." The State of Maine 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report (IWQMA), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the receiving water as:

> Non-Shellfishing Use: Category 2 - Estuarine and Marine Waters – Attaining Some Designated Uses
>
> Shellfishing Use: Category 3 - Estuarine and Marine Waters – Insufficient Information

The waters listed are closed for shellfishing by the Maine Department of Marine Resources (MEDMR), Area 59. The few reported exceedances of the fecal coliform effluent limits from July 2019 through June 2024, show that the discharge has little effect elevated fecal coliform in the

receiving water. The year-round fecal coliform effluent limits will ensure that the discharge does not cause or contribute to an exceedance of fecal coliform levels in the receiving water during the entire year.

EPA also notes that the Maine DMR traditionally closes shellfish harvesting areas in the vicinity of outfall pipes when 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. As discussed in Section VI.C.1(a), compliance with the monthly average and daily maximum limitations for fecal coliform bacteria will ensure the Eastport facility will not cause or contribute to the closure of the shellfish harvesting area.

The IWQMA also lists all estuarine and marine waters capable of supporting American lobster as Category 5-D, Estuarine and Marine Waters Impaired for Non-Shellfish Harvesting Designated Uses by Legacy Pollutants, due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomalley. EPA is not aware of any PCBs or persistent, bioaccumulating substances being discharged from the Eastport wastewater treatment that cause or contribute to this impairment.

7. Establishment of Monitoring Programs [40 C.F.R. § 125.63]

Federal regulation 40 C.F.R. § 125.63(a)(1)(i)(A) 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 C.F.R. § 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.

a) Ambient Biological Monitoring

The first round of Maine 301(h) waiver permits included requirements for sediment monitoring and benthic surveys to be conducted by SCUBA divers. To alleviate the cost of each waiver applicant conducting their own SCUBA surveys, MEDEP agreed to conduct the SCUBA surveys on behalf of the applicants. Between 1987 and 1994 four surveys were conducted by MEDEP biologist/SCUBA divers.

The results of the "field surveys and sampling of several facilities demonstrate that there is no impact, nor is any impact likely, from the discharge of primary treated wastewater from the 301(h) participating facilities." The biologists found no solids deposition within the outfall zone of initial dilution (ZID) or the control sites. They found no discernable difference between bottom dwelling organisms, flora and fauna within the ZID and again at control sites. At all four of the facilities surveyed, the divers also observed that, due to its relatively low density, the effluent rose toward the surface of the ocean and was quickly dispersed by longshore currents.

However, after surveying the sites of four facility outfalls, by letter dated February 17, 1995 from the EPA Regional Administrator, the EPA agreed with the MDEP that further SCUBA inspections of 301(h) outfalls was too dangerous due to the swift currents generally found in these receiving waters. David Courtemanch, the MEDEP Senior Biologist and diver with the most experience in potential impact of the 301(h) facilities in Maine concluded that "any monitoring beyond effluent sampling is useless, wasteful, and of no environmental benefit. He also noted that strong currents and tides around each of the outfall presented technical difficulties and risks to divers that could not be justified in future field surveys.

A recent study of 40 marine outfalls published in the Marine Pollution Bulletin Journal found that the "main physical processes that govern the mixing and evolution of wastewater in the ocean are turbulent dispersion, transport (advection and diffusion) and resuspension …In high energy environments all constituents will be broadly dispersed with a minor chance of concentrating." The study demonstrated where significant currents and wave action were present, there was almost no degradation to the marine environment from small municipal dischargers.

EPA and MEDEP agree that effluent limits and monitoring requirements are sufficiently protective of the aquatic environment at the point of discharge so as not to require additional biological monitoring. This decision is consistent with 40 C.F.R. §125.63(a)(1)(i)(B) which states that the monitoring requirements are "limited to include only those scientific investigations necessary to study the effects of the proposed discharge" and 40 C.F.R. §125.63(b)(1) which specifies that monitoring is required to the extent practicable.

b) Effluent Monitoring

The NPDES permit contains monitoring conditions that will provide data on the quality of the effluent discharged including flow, BOD_5, TSS, settleable solids, fecal coliform, enterococci bacteria, total residual chlorine, mercury, pH and whole effluent toxicity (WET) testing.

D. Effect of Modified Discharge on Other Point and Nonpoint Sources [40 C.F.R. § 125.64]

40 C.F.R. § 125.64(a) states that no modified discharge may result in any additional pollution control requirements on any other point or nonpoint source, and 40 C.F.R. § 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. Eastport anticipates receiving said determination from the MEDEP indicating that the applicant's discharge will not result in additional treatment or other requirements on other point sources prior to issuance of the final NPDES permit.

E. Toxics Control Program [40 C.F.R. § 125.66]

Eastport has no industrial connections to the collection system and certifies that there are no known or suspected sources of toxic pollutants or pesticides in their discharge.

1. Identification of Sources and Industrial Pretreatment Requirements [40 C.F.R. § 125.66(a)(2), 40 C.F.R. § 125.66(b), and 40 C.F.R. § 125.66(c)]

Given the nature of the source of the discharge (residential entities) Eastport has determined to the best of its knowledge, that there are no sources of toxic pollutants being conveyed to the treatment plant. Therefore, an industrial pretreatment program is not required pursuant to 40 C.F.R. § 125.66(c).

2. Nonindustrial Source Control Program [40 C.F.R. § 125.66(d)]

Under 40 C.F.R. § 125.66(d), the applicant must submit a proposed public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into its POTW. The requirement to submit and implement a public education program is included in Part I.H of the Draft Permit.

The requirement in 40 C.F.R. § 125.66(d)(2) for the permittee to develop and implement a non-industrial source control does not apply to small applicants that certify that there are no known or suspected water quality, sediment accumulation, or biological problems related toxic pollutants or pesticides in its discharge. Eastport qualifies as a small applicant and provided this certification with their application submissions.

F. Increase in Effluent Volume or Amount of Pollutants Discharged [40 C.F.R. § 125.67]

40 C.F.R. § 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.

The Eastport discharge will not result in any substantially increased discharge of these pollutants.

All limits in the draft permit are as stringent or more stringent than those limits in the current NPDES permit, and the application does not indicate any increase in pollutants discharged to the facility.

40 C.F.R. § 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 CSOs associated with Eastport collection system. Therefore, Eastport is in compliance with 40 C.F.R. § 125.67(b).

G. Special Conditions for Section 301(h) Modified Permits [40 C.F.R. § 125.68]

Each section 301(h) modified permit issued must contain, in addition to all applicable terms and conditions required by 40 C.F.R. § 122, the following:

1. Effluent limits and mass loadings which will assure compliance with the requirements of this subpart (40 C.F.R. § 125.68(a));

The NPDES permit contains such effluent limits and mass loadings.

2. A schedule or schedules of compliance for:

a) 40 C.F.R. § 125.68(b)(1), Pretreatment program development required by section 125.66(c).

Eastport has no industrial discharges to its collection system and so is not required by 40 C.F.R. § 125.66(c) to have a pretreatment program. Therefore, the permit does not require the development of such a program.

b) 40 C.F.R. § 125.68(b)(2), Nonindustrial toxics control program required by section 125.66(d).

Part I.H of the Draft Permit includes a schedule requiring implementation of a public education program designed to minimize the entrance of non-industrial toxic pollutants and pesticides into the collection system and wastewater treatment facility.

c) 40 C.F.R. § 125.68(b)(3), Control of combined sewer overflows required by section 125.67.

There are no CSOs associated with Eastport's collection system. Therefore, no schedule is required.

3. Monitoring Program requirements (40 C.F.R. §125.68(c) that include:

a) Biological monitoring requirements of section 125.63(b).

EPA has not required a biological monitoring program in the Draft Permit. The rationale for the decision by EPA and MEDEP to use effluent limits and monitoring requirements in place of an ambient biological monitoring program is discussed above.

b) Water quality requirements of section 125.63(c).

In recognition of the composition of the wastewater, and the significant dilution provided, EPA and MEDEP finds that receiving water quality monitoring is not necessary.

c) Effluent monitoring requirements of §§ 125.60(b), 125.62(c) and (d), and 125.63(d).

The Draft 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 C.F.R. § 125.68(d)).

The Draft Permit contains monthly reporting of the results of effluent monitoring requirements specified by the permit.

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

Pursuant to 40 C.F.R. § 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

Section 7(a) of the Endangered Species Act of 1973, as amended (ESA), grants authority to and imposes requirements on Federal agencies regarding species of fish, wildlife, or plants that have been federally listed as endangered or threatened (listed species) and regarding habitat of such species that has been designated as critical (critical habitat).

Section 7(a)(2) of the ESA requires every federal agency, in consultation with and with the assistance of the Secretary of Interior and the Secretary of Commerce, to ensure that any action it authorizes, funds or carries out, in the United States or upon the high seas, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for federally protected bird, terrestrial and freshwater species, while the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA

Fisheries) administers Section 7 consultations for listed species of marine organisms (including marine mammals and reptiles), as well as for anadromous fish species.

The federal action being considered in this case is EPA's proposed reissuance of an NPDES permit for the Facility's discharge of pollutants. The Draft Permit is intended to replace the 2019 Permit in authorizing discharges from the Facility. As the federal agency charged with authorizing the Facility's pollutant discharges, EPA assesses potential impacts to federally listed species and critical habitat and initiates consultation to the extent required, under Section 7(a)(2) of the ESA.

EPA has reviewed the federal endangered or threatened species of fish, wildlife, and plants in the expected action area of the outfalls to determine if EPA's proposed NPDES permit could potentially impact any such listed species.

1. **Terrestrial and Avian Species (US Fish and Wildlife Service)**

Regarding protected species under the jurisdiction of USFWS, three species may be present in the action area of the Facility's discharge,[4] the endangered northern long-eared bat (*Myotis septentrionalis*), the endangered roseate tern (*Sterna dougallii dougallii*) and the proposed endangered tricolored bat (*Perimyotis subflavus)*.

According to the USFWS, the northern long-eared bat is found in, "winter – mines and caves, summer – wide variety of forested habitats." This species is not considered aquatic. However, because the Facility's projected action area overlaps with the general statewide range of the northern long-eared bat, EPA submitted an evaluation on potential effects of the project to the Information for Planning and Consultation (IPaC) system provided by the USFWS. The USFWS system confirmed by letter that, based on the specific project information submitted, the project would have "no effect" on the northern long-eared bat[5].

At this time, no such USFWS IPaC mechanism is in place to evaluate potential impacts to the proposed endangered tricolored bat. Because the habitat of the tricolored bat is generally similar to the NLE bat (overwintering - caves or mines; spring/summer/fall – deciduous live or dead hardwood trees), EPA has determined that the reissuance of this permit would also have "no effect" on the proposed endangered tricolored bat[6].

Finally, the action area of the facility may overlap with the roseate tern. According to the USFWS:

> *The roseate tern (Sterna dougallii) is found throughout the world. The North Atlantic subspecies, Sterna dougallii dougallii, is divided into two populations in North America because they breed in two discrete areas and rarely mix. The Northeastern population,*

[4] *See* https://ecos.fws.gov/ipac/
[5] USFWS IPaC Project code: 2024-0140668, September 6, 2024.
[6] EPA Supplemental Basis Document – Tricolored Bat; May 14, 2024.

federally listed as endangered, breeds on coastal islands from Eastern Canada, in Nova Scotia and Quebec, to New York.

….

Unfortunately, the bird's beauty led to its decline as hunters shot them indiscriminately to decorate hats in the late 1800s. Since the 1930s, the species began to rebound when hunting was banned and many of its breeding colonies were protected. Nevertheless, the two populations remain small and vulnerable to extirpation because many of their breeding colony sites are no longer suitable for nesting. This lack of suitable nesting is due to the combined negative impacts from sea level rise, predation and human development.

EPA has determined that because the reissuance of this permit will not impact the above factors, this federal action will have no effect on the roseate tern. To support this no effect determination, EPA also completed a USFWS determination key that made the same conclusion.[5]

This concluded EPA's consultation responsibilities for this NPDES permitting action under ESA section 7(a)(2) with respect to the northern long-eared bat, tricolored bat, and roseate tern. No ESA section 7 consultation is required with USFWS for these species.

2. Marine and Anadromous Species (National Marine Fisheries Service)

The Facility discharges into the Cobscook Bay, which is part of Passamaquoddy Bay. The outfall and action area overlap with coastal waters where several protected marine species are found. Three species of anadromous fish; shortnose sturgeon (*Acipenser brevirostrum*), Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), and Atlantic salmon (*Salmo salar*) are potentially present in the vicinity of the discharge. In general, adults and subadults of these species are present in coastal waters.

Also present in the action area are four species of sea turtle, including: the leatherback sea turtle (*Dermochelys coriacea*), green sea turtle (*Chelonia mydas*), kemp's ridley sea turtle (*Lepidochelys kempii*), and the loggerhead sea turtle (*Caretta caretta*). According to NOAA Fisheries, adult and juvenile life stages of leatherback, loggerhead, Kemp's ridley and green sea turtles are expected in coastal Maine waters from June 1 through November 30 while migrating and foraging. Also, adult shortnose sturgeon and adult and subadult Atlantic sturgeon are likely present in the action area.

Because these species may be affected by the discharges authorized by the proposed permit, EPA has thoroughly evaluated the potential impacts of the permit action on these anadromous species. Based on that evaluation, EPA's preliminary determination is that this action may affect, but is not likely to adversely affect, the protect species that are expected in the vicinity of the action area of the discharge. Therefore, EPA has judged that a formal consultation pursuant to Section 7 of the ESA is not required. EPA is seeking concurrence from NOAA Fisheries regarding this determination during the Draft Permit's public comment period.

Initiation of consultation is required and shall be requested by EPA or by USFWS/NOAA Fisheries where discretionary federal involvement or control over the action has been retained or is

authorized by law and if: 1) new information reveals that the action may affect listed species or critical habitat in a manner or to an extent not previously considered in the analysis; 2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the previous analysis; 3) a new species is listed or critical habitat designated that may be affected by the identified action; or 4) there is any incidental taking of a listed species that is not covered by an incidental take statement.

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 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §§ 1801, *et seq*., EPA is required to consult with NOAA Fisheries if proposed actions that EPA funds, permits, or undertakes, "may adversely impact any essential fish habitat." *See* 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". *See* 16 U.S.C. § 1802(10). "Adverse impact" means any impact that reduces the quality and/or quantity of EFH. 50 CFR § 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. A New England Fishery Management Council's Omnibus Essential Fish Habitat Amendment in 2017 updated the descriptions. The information is included on the NOAA Fisheries website at: https://www.fisheries.noaa.gov/topic/habitat-conservation. In some cases, a narrative identifies rivers and other waterways that should be considered EFH due to present or historic use by federally managed species.

The Federal action being considered in this case is EPA's proposed NPDES permit for the Eastport Wastewater Treatment Facility, which discharges though Outfall 001 to Cobscook Bay as discussed in Section 4.1 of this document. Based on available EFH information, including the NOAA Fisheries EFH Mapper,[7] EPA has determined that the receiving water in the vicinity of the discharge is designated as EFH for the species shown in Table 1, below.

[7] https://www.habitat.noaa.gov/apps/efhmapper/

Table 1. EFH Designated Species

Species/Management Unit	Lifestage(s) Found at Location
American Plaice	Adults, Juveniles, Eggs, Larvae
Atlantic Cod	Adult, Juvenile, Larvae
Atlantic Herring	Adults, Juvenile, Larvae
Atlantic Mackerel	Adult, Juvenile, Larvae
Atlantic Sea Scallop	All
Little Skate	Adult, Juvenile
Ocean Pout	Adult, Eggs, Juvenile
Pollock	Adult, Juvenile, Larvae
Red Hake	Adult, Eggs/Larvae/Juvenile
Silver Hake	Adult
Smooth Skate	Juvenile
Thorny Skate	Juvenile
White Hake	Adult, Juvenile
Windowpane Flounder	Adults, Eggs, Juvenile, Larvae
Winter Flounder	Eggs, Juvenile, Larvae/Adult
Winter Skate	Juvenile
Habitat Area of Particular Concern	
Atlantic Salmon	
Inshore 20m Juvenile Cod	

Therefore, consultation with NOAA Fisheries under the Magnuson-Stevens Fishery Conservation and Management Act is required. EPA has determined that actions regulated by the Draft Permit may adversely affect EFH. The Draft Permit has been conditioned in the following way to minimize any impacts that reduce the quality and/or quantity of EFH for Atlantic salmon.

EPA has determined that the operation of this Facility, as governed by this permit action, may adversely affect the EFH of Atlantic salmon. The Draft Permit has been conditioned in the following way to minimize any impacts that reduce the quality and/or quantity of EFH:

- This Draft Permit action does not constitute a new source of pollutants because it is the reissuance of an existing NPDES permit;

- Discharge limitations have been proposed for pH, total suspended solids, settleable solids, fecal coliform bacteria, enterococci bacteria, total residual chlorine, total mercury, in order to meet technology-based or state water quality standards;

- The Draft Permit proposes new annual whole effluent toxicity (WET) and priority pollutant testing to ensure that the discharge does not cause toxicity problems; Acute and chronic toxicity tests will be conducted annually to evaluate the lethality of the discharge;

- The effluent limitations and conditions in the Draft Permit were developed to be protective of all aquatic life;

• The proposed Draft Permit requirements minimize any reduction in quality and/or quantity of EFH, either directly or indirectly.

EPA has determined that the conditions and limitations contained in the Draft Permit adequately protect all aquatic life, as well as the essential fish habitat for the species listed above in Cobscook Bay. Further mitigation is not warranted. Should adverse impacts to EFH be detected as a result of this permit action, or if new information is received that changes the basis for EPA's conclusions, NOAA Fisheries Habitat and Ecosystem Services Division will be contacted and an EFH consultation will be re-initiated.

At the beginning of the public comment period, EPA notified NOAA Fisheries Habitat and Ecosystem Services Division that the Draft Permit and this Fact Sheet were available for review and provided a link to the EPA NPDES Permit website to allow direct access to the documents.

In addition to this Fact Sheet and the Draft Permit, information to support EPA's finding was included in a letter under separate cover that will be sent to the NOAA Fisheries Habitat and Ecosystem Services Division during the public comment period.

VIII. 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 C.F.R. § 125.59(i)(2), until the appropriate State certification/concurrence is granted or waived pursuant to 40 C.F.R. § 124.54. EPA expects that the State of Maine will make such a determination upon review of the proposed draft permit conditions.

IX. CONCLUSION

EPA has determined that Eastport treated effluent will receive sufficient 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 C.F.R. § 125, Subpart G.

X. TENTATIVE DECISION

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

1. The Eastport treatment system maintaining a monthly average of 30% removal of BOD_5 and 50% removal of 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.

XI. PUBLIC COMMENTS

The public notice will be placed on the EPA Region 1 NPDES website at: https://www.epa.gov/npdes-permits/maine-npdes-permits. All persons, including applicants, who believe any condition of the tentative decision 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 EPA Permit Writer named below.

Prior to the close of the public comment period, any person may submit a written request to EPA for a public hearing to consider the Draft Permit. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held if the criteria stated in 40 CFR § 124.12 are satisfied. In reaching a final decision on the Draft Permit, EPA will respond to all significant comments in a Response to Comments document attached to the Final Permit and make these responses available to the public on EPA's website.

Following the close of the comment period, and after any public hearings, if such hearings are held, EPA will issue a Final Permit decision, forward a copy of the final decision to the applicant, and provide a copy or notice of availability of the final decision to each person who submitted written comments or requested notice. Within 30 days after EPA serves notice of the issuance of the Final Permit decision, an appeal of the federal NPDES permit may be commenced by filing a petition for review of the permit with the Clerk of EPA's Environmental Appeals Board in accordance with the procedures at 40 CFR § 124.19.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY – REGION 1 (EPA)
WATER DIVISION
5 POST OFFICE SQUARE
BOSTON, MASSACHUSETTS 02109

DEPARTMENT OF ENVIRONMENTAL PROTECTION (MEDEP)
BUREAU OF WATER QUALITY
STATE HOUSE STATION #17
AUGUSTA, me 04333-0017

JOINT PUBLIC NOTICE OF THE ISSUANCE OF A TENTATIVE CLEAN WATER ACT SECTION 301(H) WAIVER FROM SECONDARY TREATMENT DECISION DOCUMENT, DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE INTO WATERS OF THE UNITED STATES UNDER SECTIONS 301 AND 402 OF THE CLEAN WATER ACT, AS AMENDED, AND CODE OF MAINE RULES (CMR) 06, CHAPTERS 523 AND 524, AND REQUEST FOR STATE CERTIFICATION UNDER SECTION 401 OF THE CLEAN WATER ACT.

PUBLIC NOTICE PERIOD: October 24, 2024 – November 25, 2024

PERMIT NUMBER: ME0100200

PUBLIC NOTICE NUMBER:

NAME AND MAILING ADDRESS OF APPLICANT:

City of Eastport
78 High Street
Eastport, Maine 04631

NAME AND ADDRESS OF THE FACILITY WHERE DISCHARGE OCCURS:

Main Wastewater Treatment Facility
County Road, Eastport, Maine 04631

RECEIVING WATER AND CLASSIFICATION:

Cobscook Bay, Class SC

PREPARATION OF THE DRAFT PERMIT AND EPA REQUEST FOR CWA § 401 CERTIFICATION:

The U.S. Environmental Protection Agency (EPA) and the Maine Department of Environmental Protection (MEDEP) have cooperated in the development of a Draft Permit for the Waste Water Treatment Facility, which discharges primary treated domestic wastewater. EPA is also public noticing its Tentative Clean Water Act Section 301(h) Waiver from Secondary Treatment Decision.
The effluent limits and permit conditions imposed have been drafted to assure compliance with the Clean Water Act, 33 U.S.C. Sections 1251 et seq., the CMR 06, Chapters 523 and 524 and the Maine Revised Statutes, Title 38 Chapter 3 Protection and Improvement of Waters, Subchapter 1 Article 4-A § 464 (Maine Water Quality Standards).

EPA has requested that MEDEP certify this Draft Permit with the Waiver from Secondary Treatment,

pursuant to Section 401 of the Clean Water Act and implementing regulations. Under federal regulations governing the NPDES program at 40 Code of Federal Regulations (CFR) § 124.53(e), state certification shall contain conditions that are necessary to assure compliance with the applicable provisions of CWA sections 208(e), 301, 302, 303, 306, and 307 and with appropriate requirements of State law, including any conditions more stringent than those in the Draft Permit that MEDEP finds necessary to meet these requirements. Furthermore, MEDEP may provide a statement of the extent to which each condition of the Draft Permit can be made less stringent without violating the requirements of State law.

INFORMATION ABOUT THE DRAFT PERMIT:

The Draft Permit and explanatory Fact Sheet may be obtained at no cost at https://www.epa.gov/npdes-permits/maine-draft-individual-npdes-permits or by contacting:

Meridith Finegan
Telephone: (617) 918-1533
Email: finegan.meridith@epa.gov

Any electronically available documents that are part of the administrative record can be requested from the EPA contact above.

PUBLIC COMMENT AND REQUESTS FOR PUBLIC HEARINGS:

All persons, including applicants, who believe any condition of this Draft Permit and or Secondary Treatment Waiver Decision, are inappropriate, must raise all issues and submit all available arguments and all supporting material for their arguments in full by November 25, 2024, to the address listed above.
Any person, prior to such date, may submit a request in writing to EPA and MEDEP for a public hearing to consider this Draft Permit and/or the Secondary Treatment Waiver Decision. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least a thirty-day public notice whenever the Regional Administrator finds that the response to this notice indicates significant public interest. In reaching a Final Decision on this Draft Permit and Secondary Treatment Waiver Decision, the Regional Administrator will respond to all significant comments and make the responses available to the public at EPA's Boston Office.

FINAL PERMIT DECISION:

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a Final Permit Decision, including a Final Decision for the Secondary Treatment Waiver and forward a copy of the final decisions to the applicant and each person who has submitted written comments or requested notice. Within thirty (30) days following the notice of the Final Permit Decision, any interested person may submit petition to the Environmental Appeals Board to reconsider or contest the final decision.

KEN MORAFF, DIRECTOR
WATER DIVISION
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY – REGION 1

MELANIE LOYZIM, COMMISSIONER
BUREAU OF WATER QUALITY
MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION