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.,

Stonington Sanitary District
P.O Box 175
Stonington ME, 04681

is authorized to discharge from a facility located at

17 Main Street
Stonington, Maine

to receiving water named **Deer Island Thorofare, East Penobscot Bay**

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

This NPDES permit shall become effective on the first day of the calendar month following 60 days after signature by both the EPA Director and the Commissioner of the Maine Department of Environmental Protection. 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 14, 2003. This permit consists of the *National Pollutant Discharge Elimination System Permit including effluent limitations and monitoring requirements (Part I) and MPDES Standard Conditions Applicable to All Permits,* (last revised July 1, 2002), *and EPA NPDES Part II Standard Conditions (January 2007).*

Signed this ____day of _____

_____
Art Johnson, Acting Director
Office of Ecosystems Protection
Environmental Protection Agency
Boston, Massachusetts

Signed this ___day of _____

_____
Paul Mercer, Commissioner
Maine Department of Environmental Protection
Augusta, Maine

* Pursuant to 40 CFR 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

STONINGTON SANITARY DISTRICT STONINGTON, HANCOCK COUNTY, MAINE PUBLICLY OWNED TREATMENT WORKS NPDES PERMIT No: ME0101851 MAINE WASTE DISCHARGE LICENCE: W001475-6C-D-R	)	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE LICENSE **RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et seq., and 38 M.R.S.A., Section 414-A et seq., and applicable regulations, the U.S. Environmental Protection Agency (EPA hereinafter) and the Maine Department of Environmental Protection (Department hereinafter) have considered the application of the Stonington Sanitary District (SSD hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The SSD has applied for issuance of a combined National Pollutant Discharge Elimination System (NPDES) permit #ME0101851 and Maine Waste Discharge License (WDL) #W001475-6C-D-R. The permit/license (permit hereinafter) authorizes the discharge of up to a 12-month rolling average flow of 0.175 million gallons per day (MGD) of primary treated sanitary wastewater to the Deer Island Thorofare, Class SB, in Stonington, Maine.

PERMIT SUMMARY

This permitting action is similar to the previous Permit and State Licensing action in that it carries forward:

1. The 12-month rolling average technology-based requirements to achieve a minimum of 30% removal of biochemical oxygen demand (BOD_5) and a minimum of 50% removal for total suspended solids (TSS).

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

3. The limits for pH, total residual and chlorine.

This permitting action is different than the previous Permit and State Licensing action in that it:

4. Establishes a new two Tier system for 12-month rolling average flow limit (Tier I) of up to 0.106 MGD or 106,000 gpd, and (Tier II) of 106,000 up to 175,000 gpd.

5. Requires 12-month rolling average mass limits for BOD_5 and TSS based on the revised flow limits. The definition of 12 month rolling average has been modified. Reporting of the monthly average BOD_5 and TSS results with the DMR cover letter is required.

6. Requires domestic septage documentation be kept on site for inspection.

7. Includes requirements for operations and maintenance of the collection system.

8. Establishes new monthly average and daily maximum enterococci bacteria limits and revises limits for fecal coliform.

9. Requires year-round (instead of seasonal) limits and monitoring for fecal coliform bacteria and total residual chlorine with year-round disinfection of the effluent.

10. Provides a schedule of compliance for new year-round bacteria and total residual chlorine limits.

11. Requires annual Certification Statement for Reduced/Waived Toxics by permittee.

CONCLUSIONS

BASED on the findings in the Fact Sheet dated 8/7/2017, and subject to the Conditions listed below, the USEPA 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. In addition to any other grounds specified herein, this permit shall be modified or revoked at any time if, on the basis of any new data, the EPA or director determines that continued discharges may cause unreasonable degradation of the marine environment.

4. The provisions of the State's antidegradation policy, 38 MRSA 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) The standards of classification of the receiving water body are met or, 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.

5. 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 STONINGTON SANITARY DISTRICT, to discharge up to a 12-month rolling average flow of 175,000 gpd of primary treated wastewaters to the Deer Island Thorofare, Class SB, in Stonington, 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,* January 2007) copies attached.

2. The Special 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 CFR §122 6). [*Maine Administrative Procedure Act*, 5 M.R.S.A. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (effective April 1, 2003)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 4, 2007.
Date of application acceptance: September 26, 2008.

Date filed with Maine Board of Environmental Protection
This order prepared jointly by GREGG WOOD, Bureau of Land & Water Quality and DOUG CORB, EPA Region I.

SPECIAL CONDITIONS

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) 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 (MDEP) pursuant to the Maine law, 38 M.R.S.A., 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 CMR 3.19, are hereby incorporated by reference into this surface water discharge permit/license (permit hereinafter).

2. This authorization also incorporates the state water quality certification issued by MDEP 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 MDEP'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 an 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. The permittee is authorized to discharge primary treated sanitary wastewaters from **Outfall 001** to the Deer Island Thorofare and must monitor and limit discharges as follows:

TIER I – Twelve Month Rolling Average of ≤ 106,000 gallons per day (gpd).

Effluent Characteristic	Discharge Limitations				Monitoring Requirement	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [1] *[50050]* 12 Month Rolling Average	106,000 gpd *[07]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
Flow *[50050]* Monthly Average	Report gpd *[07]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 [1] *[00310]* 12 Month Rolling Average	217 lbs/day *[26]*	Report, lbs/day *[26]*	245 mg/L *[19]*	Report, mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD_5 % Removal [2] *[50076]*	---	---	30 % *[23]*	---	1/Month *[01/30]*	Calculate*[CA]*
TSS [1] *[00530]* 12 Month Rolling Average	144 lbs/day *[26]*	Report, lbs/day *[26]*	163 mg/L *[19]*	Report, mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS % Removal [2] *[81011]*	---	---	50 % *[23]*	---	1/Month *[01/30]*	Calculate*[CA]*
Settleable Solids *[00545]* May 15 – September 30 October 1 – May 14	 --- ---	 --- ---	 --- ---	 Report, (ml/L) *[25]* Report, (ml/L) *[25]*	 3/Week *[03/07]* 1/Week *[01/07]*	 Grab *[GR]* Grab *[GR]*
Fecal Coliform Bacteria [3,5] *[31615]*	---	---	14 CFU/100 ml *[30]*	31 CFU/100 ml *[30]*	1/Week *[01/07]*	Grab *[GR]*
Enterococci bacteria [3,5], *[61211]* (May 15 – September 30 each year)	---	---	8 CFU/100 ml *[30]*	54 CFU/100 ml *[30]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine [4,5] *[50060]*	---	---	---	1.0 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH *[00400]* May 15 – September 30 October 1 – May 14	The pH shall not be less than 6.0 standard units (SU) or greater than 9.0 SU at any time. Report minimum and maximum for the month.				1/Day *[01/01]* 3/Week *[03/07]*	Grab *[GR]* Grab *[GR]*

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

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. The permittee is authorized to discharge primary treated sanitary wastewaters from **Outfall 001** to the Deer Island Thorofare and must monitor and limit discharges as follows:

TIER II – Twelve Month Rolling Average of >106,000 gpd but ≤175,000 gpd.

Effluent Characteristic	**Discharge Limitations**				**Monitoring Requirement**	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow (1) *[50050]* 12 Month Rolling Average	175,000 gpd *[07]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
Flow *[50050]* Monthly Average	Report gpd *[07]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 (1) *[00310]* 12 Month Rolling Average	358 lbs/day *[26]*	Report, lbs/day *[26]*	245 mg/L *[19]*	Report, mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD_5 % Removal (2) *[50076]*	---	---	30 % *[23]*	---	1/Month *[01/30]*	Calculate*[CA]*
TSS (1) *[00530]* 12 Month Rolling Average	238 lbs/day *[26]*	Report, lbs/day *[26]*	163 mg/L *[19]*	Report, mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS % Removal (2) *[81011]*	---	---	50 % *[23]*	---	1/Month *[01/30]*	Calculate*[CA]*
Settleable Solids *[00545]* May 15 – September 30 October 1 – May 14	 --- ---	 --- ---	 --- ---	 Report, (ml/L) *[25]* Report, (ml/L) *[25]*	 3/Week *[03/07]* 1/Week *[01/07]*	 Grab *[GR]* Grab *[GR]*
Fecal Coliform Bacteria (3,5) *[31615]*	---	---	14 CFU/100 ml *[30]*	31 CFU/100 ml *[30]*	1/Week *[01/07]*	Grab *[GR]*
Enterococci bacteria (3,5) *[61211]* (May 15 – September 30 each year)	---	---	8 CFU/100 ml *[30]*	54 CFU/100 ml *[30]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine *[50060]* (4,5)	---	---	---	1.0 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH *[00400]* May 15 – September 30 October 1 – May 14	The pH shall not be less than 6.0 standard units (SU) or greater than 9.0 SU at any time. Report minimum and maximum for the month.				1/Day *[01/01]* 3/Week *[03/07]*	Grab *[GR]* Grab *[GR]*

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

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Sampling – Sampling and analysis must be conducted in accordance with; a) methods approved in 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by EPA and the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 or laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

Sampling Locations – BOD_5, TSS, pH, settleable solids, and TRC samples shall be collected after dechlorination from the Over/Board (O/B) sampling point, on the west end of the chlorine contact chamber (CCC). Bacteria samples shall be taken from the Tank (T) sampling point before chlorination on the west end of the chlorine contact chamber (CCC).

Footnotes

1. Flow is 12-month rolling average limitation. Report annual average, monthly average, and the maximum daily flow. The (gpd) limit is an annual average, which shall be reported as a 12-month rolling average. The value shall be calculated as the arithmetic mean of the monthly average flow for the reporting month and the monthly average flows of the previous eleven months. BOD_5 and TSS 12 month rolling average mass and concentration limits shall also be calculated as the arithmetic mean of the monthly average values for the reporting month and the monthly average values of the previous eleven months. The permittee shall also report the monthly average BOD_5 and TSS for each month with the Discharge Monitoring Report cover letter.

2. **Percent removal** - The permittee shall achieve at least 30% removal for BOD_5 and 50% removal for TSS. For the purposes of calculating ~~a~~ 12-month rolling average, the permittee shall use the total sum of monthly averages divided by 12 to get the rolling average of monthly averages. The permittee shall also report the monthly average percent removal for each month.

   Calculating BOD_5 12-Month Rolling Monthly Average 30% Removal Limit

   $$\frac{(350 \text{ mg/L} - X \text{ mg/L}) * (100\%)}{(350 \text{ mg/l})} = Y \text{ \% Removal}$$

   Where 350 mg/L is the default influent BOD_5 Concentration in mg/L
   X = 12-Month Rolling Monthly Average BOD_5 effluent concentration in mg/L
   Y = Actual 12-Month Rolling Monthly Average BOD_5 Percent Removal

Calculating TSS 12-Month Rolling 50% Average Removal Limit

$$\frac{(163 \text{ mg/L} - X \text{ mg/L}) * (100\%)}{(163 \text{ mg/L})} = Y \text{ \% Removal}$$

Where 163 mg/L is the default influent BOD5 Concentration in mg/L
X = 12-Month Rolling Average TSS effluent concentration in mg/L
Y = Actual 12-Month Rolling Average TSS Percent Removal

3. **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 May 15th – September 30th of each year. The EPA and Department reserves the right to impose the limitation on a year-round basis to protect the health, safety and welfare of the public.

4. **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.

5. See Section M for **Schedule of Compliance**.

C. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time or which would impair the usages designated by the classification of the receiving waters.

2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.

3. The discharge shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.

4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

D. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade I** 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 CMR 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. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on September 26, 2008, 2) the terms and conditions of this permit; and 3) only from Outfall #001. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

F. NOTIFICATION REQUIREMENT

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

1. Any substantial change in the volume or character of pollutants being introduced into the wastewater 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 shall include information on:

   a The quality or quantity of wastewater introduced to the wastewater collection and treatment system; and

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

G. SEPTIC TANK MAINTENANCE

To ensure that the individual septic tanks are providing best practicable treatment and achieving desired percent concentration removal levels for BOD_5 and TSS, the permittee is required to maintain a revolving inspection and maintenance schedule for pumping out the solids in all the septic tanks.

All septic tanks and other treatment tanks shall be inspected at least once during the five-year term of this permit and maintained to ensure that they are providing best practicable treatment. Tank contents shall be removed as required in the Maine State Waste Water Disposal Rules 144A CMR 241, Section 909.1 *Maintenance* and managed in accordance with the Maine State Septage Management rules found at Chapter 420.

Septic tank inspections shall include: tank, chimney & baffle condition, depth of scum & sludge levels, dates of inspection & pumping, and gallons pumped.

H. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff shall 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 shall 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 shall review their plan annually and record necessary changes to keep the plan up to date.

I. OPERATIONS AND MAINTENANCE FOR THE TREATMENT PLANT

This facility shall maintain a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which 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.

By December 31 of each year and within 90 days of any process changes or minor equipment upgrades *[PCS Code 09699],* the permittee shall 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 shall 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 Codes 50108],* the permittee shall 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 shall 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 wastewater treatment facility.

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

J. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

Operation and maintenance of the sewer system shall 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:

1. Maintenance Staff

The permittee shall 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.

2. Preventive Maintenance Program

The permittee shall maintain an ongoing preventive maintenance program to prevent overflows and bypasses caused by malfunctions or failures of the sewer system infrastructure. The program shall include an inspection program designed to identify all potential and actual unauthorized discharges.

3. Infiltration/Inflow

The permittee shall control infiltration and inflow (I/I) into the sewer system as necessary to prevent high flow related unauthorized discharges from their collection system or excessive I/I (see 40 CFR §125.60(c)(1)(iii)).

4. Collection System Mapping

Within 30 months of the effective date of this permit, the permittee shall prepare a map of the sewer collection system it owns (see page 1 of this permit for the effective date).

The map shall 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 shall 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) shall include, but not be limited to the following:

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

K. 06-096 CMR 530(2)(D)(4) STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

By December 31 of each calendar year, the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit ***[PCS Code 95799]***: See **Attachment C** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

(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.

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

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

(e) Increases in the type or volume of hauled wastes accepted by the facility.

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 exceedences of ambient water quality criteria/thresholds.

L. SEPTAGE USE/DISPOSAL

1. The permittee shall comply with all existing federal and state laws and regulations that apply to septage use and disposal practices, including EPA regulations promulgated at 40 CFR Part 503 and Maine State Septage Management rules found at Chapter 420.

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

3. The following information shall be kept onsite by the permittee for a minimum of five years.

   a) The location of the site where domestic septage is applied, either the street address, or the longitude and latitude of the site (available from the U.S. Geological Survey maps).

b) The number of acres to which domestic septage is applied at each site.

c) The date and time of each domestic septage application.

d) The nitrogen requirement for the crop or vegetation grown on each site during the year. Also, while not required, indicating the expected crop yield would help establish the nitrogen requirement.

e) The gallons of septage which are applied to the site during the specified 365-day period.

4. The certification shown below must be signed and submitted by the Cognizant Official with each sludge report.

CERTIFICATION

"I certify under penalty of law, that the pathogen requirements in [*insert whether alternative 1 or 2*] and the vector attraction reduction requirements in [*insert either vector reduction alternative 1, 2 or 3*] have/have not [*circle one*] been met. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the pathogen requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

Signature _____

5. A description of how the pathogen requirements are met for each batch of domestic septage that is land applied.

6. A description of how the vector attraction reduction requirement is met for each batch of domestic septage that is land applied.

7. The permittee shall notify EPA and Department of any change in septage use or disposal practices.

M. SCHEDULE OF COMPLIANCE

For 12 months from the effective date of the permit:

a) SSD will monitor enterococci bacteria without limits.

b) From May 15th through September 15, SSD will comply with interim Fecal Coliform limits of 15 colonies/I00 ml and 50 colonies/I00 ml as monthly average and daily maximum concentration, respectively.
c) From May 15th through September 15, SSD will comply with the 1.0 mg/L maximum daily total residual chlorine limit. From September 16th though May 14th, SSD shall monitor maximum daily total residual chlorine without limit.
d) Twelve months from the effective date, SSD shall be in compliance with all final permit limits.

The SSD will need to make operational changes to meet the new year round fecal coliform limits. SSD staff will also need to purchase and learn to operate enterococci testing equipment. Prior to this permit, chlorination was applied seasonally from May 15th through September 15th. SSD will need to provide disinfection year-round, requiring additional staffing, additional chemicals and time to optimize chlorination/de-chlorination equipment during winter months. The schedule will allow SSD to monitor enterococci bacteria without limits for one year from the effective date of the permit. SSD will have to maintain the current seasonal (May 15th through September 15th) fecal coliform limits of 15 colonies/I00 ml and 50 colonies/I00 ml as average and daily maximum concentration limits, respectively. Twelve months from the effective date of the permit, SSD will need to comply with all permit limitations.

N. MONITORING AND REPORTING

Electronic Reporting: NPDES Electronic Reporting, 40 CFR 127, requires MEPDES 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.

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

1. Submitted by a facility authorized signatory; and
2. Submitted no later than midnight on the 15th day of the month following the completed reporting period.
3. 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.

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.

b. Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, shall 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's Office of Environmental Stewardship at:

U.S. Environmental Protection Agency
Office of Environmental Stewardship
5 Post Office Square, Suite 100 (OES04-4)
Boston, MA 02109-3912
617-918-1510

O. RE-OPENING OF PERMIT FOR MODIFICATIONS

Upon evaluation of test results required by the Special Conditions 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 and EPA 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.

P. SEVERABILITY

In the event that any provision or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect, and shall be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

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
(January, 2007)

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PART II. 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) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

a. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the 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, even if the permit has not yet been modified to incorporate the requirements.

b. The CWA provides that any person who violates Section 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any of such sections in a permit issued under Section 402, or any requirement imposed in a pretreatment program approved under Section 402 (a)(3) or 402 (b)(8) of the CWA is subject to a civil penalty not to exceed $25,000 per day for each violation. Any person who negligently violates such requirements is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. Any person who knowingly violates such requirements 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.

c. Any person may be assessed an administrative penalty by the Administrator for violating Section 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

Note: See 40 CFR §122.41(a)(2) for complete “Duty to Comply” regulations.

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 notifications of planned changes or anticipated noncompliance does not stay any permit condition.

3. Duty to Provide Information

The permittee shall furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator 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 Regional Administrator, upon request, copies of records required to be kept by this permit.

4. Reopener Clause

The Regional Administrator reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA in order to bring all discharges into compliance with the CWA.

For any permit issued to a treatment works treating domestic sewage (including "sludge-only facilities"), the Regional Administrator or Director shall include a reopener clause to incorporate any applicable standard for sewage sludge use or disposal promulgated under Section 405 (d) of the CWA. The Regional Administrator or Director may promptly modify or revoke and reissue any permit containing the reopener clause required by this paragraph if the standard for sewage sludge use or disposal is more stringent than any requirements for sludge use or disposal in the permit, or contains a pollutant or practice not limited in the permit.

Federal regulations pertaining to permit modification, revocation and reissuance, and termination are found at 40 CFR §122.62, 122.63, 122.64, and 124.5.

5. 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).

6. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges.

7. Confidentiality of Information

a. In accordance with 40 CFR 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 CFR 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 as defined in 40 CFR §2.302(a)(2).

c. Information required by NPDES application forms provided by the Regional Administrator under 40 CFR §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.

8. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after its expiration date, 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 Regional Administrator. (The Regional Administrator shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

9. State Authorities

Nothing in Part 122, 123, or 124 precludes more stringent State regulation of any activity covered by these regulations, whether or not under an approved State program.

10. Other Laws

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

PART II. 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 and with the requirements of storm water pollution prevention plans. 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 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 be reasonably 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 provision of Paragraphs B.4.c. and 4.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.
(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D.1.e. of this part (Twenty-four hour reporting).

d. Prohibition of bypass

Bypass is prohibited, and the Regional Administrator may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(2) 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
(3) i) The permittee submitted notices as required under Paragraph 4.c. of this section.
ii) The Regional Administrator may approve an anticipated bypass, after considering its adverse effects, if the Regional Administrator 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;
(3) The permittee submitted notice of the upset as required in paragraphs D.1.a. and 1.e. (Twenty-four hour notice); and
(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.

PART II. 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 for 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 (or longer as required by 40 CFR Part 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 except for the information concerning storm water discharges which must be retained for a total of 6 years. This retention period may be extended by request of the Regional Administrator 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 results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in the permit.

e. 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.

2. Inspection and Entry

The permittee shall allow the Regional Administrator 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 CWA, any substances or parameters at any location.

PART II. D. REPORTING REQUIREMENTS

1. Reporting Requirements

a. Planned Changes. The permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required 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 CFR§122.29(b); or
(2) The alteration or addition could significantly change the nature or increase the quantities of the pollutants discharged. This notification applies to pollutants which are subject neither to the effluent limitations in the permit, nor to the notification requirements at 40 CFR§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 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 Regional Administrator 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 Regional Administrator. The Regional Administrator 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 CWA. (See 40 CFR Part 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.

(2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of the 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 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.

(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 CFR §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 Regional Administrator in the permit to be reported within 24 hours. (See 40 CFR §122.44(g).)

(3) The Regional Administrator may waive the written report on a case-by-case basis for reports under Paragraph D.1.e. if the oral report has been received within 24 hours.

f. Compliance Schedules. Reports of compliance or noncompliance with, 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.

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 Regional Administrator, it shall promptly submit such facts or information.

2. Signatory Requirement

a. All applications, reports, or information submitted to the Regional Administrator shall be signed and certified. (See 40 CFR §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 noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 2 years per violation, or by both.

3. Availability of Reports.

Except for data determined to be confidential under Paragraph A.8. 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 Regional Administrator. 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.

PART II. E. DEFINITIONS AND ABBREVIATIONS

1. Definitions for Individual NPDES Permits including Storm Water Requirements

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 to, 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 and 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.

Average means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For total and/or fecal coliforms and Escherichia coli, 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.

Average weekly discharge limitation means the highest allowable average of "daily discharges" measured during the calendar week divided by the number of "daily discharges" measured during the 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.

Best Professional Judgment (BPJ) means a case-by-case determination of Best Practicable Treatment (BPT), Best Available Treatment (BAT), or other appropriate technology-based standard based on an evaluation of the available technology to achieve a particular pollutant reduction and other factors set forth in 40 CFR §125.3 (d).

Coal Pile Runoff means the rainfall runoff from or through any coal storage pile.

Composite Sample means a sample consisting of a minimum of eight grab samples of equal volume collected at equal intervals during a 24-hour period (or lesser period as specified in the section on Monitoring and Reporting) and combined proportional to flow, or a sample consisting of the same number of grab samples, or greater, collected proportionally to flow over that same time period.

Construction Activities - The following definitions apply to construction activities:

(a) Commencement of Construction is the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

(b) Dedicated portable asphalt plant is a portable asphalt plant located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject to the asphalt emulsion effluent limitation guideline at 40 CFR Part 443.

(c) Dedicated portable concrete plant is a portable concrete plant located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

(d) Final Stabilization means that all soil disturbing activities at the site have been complete, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

(e) Runoff coefficient means the fraction of total rainfall that will appear at the conveyance as runoff.

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) Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, and Pub. L. 97-117; 33 USC §§1251 et seq.

Daily Discharge means the discharge of a pollutant measured during the 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.

Director normally means the person authorized to sign NPDES permits by EPA or the State or an authorized representative. Conversely, it also could mean the Regional Administrator or the State Director as the context requires.

Discharge Monitoring Report Form (DMR) means the EPA standard 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 (See "Point Source" definition).

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 Regional Administrator 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".

EPA means the United States "Environmental Protection Agency".

Flow-weighted composite sample means a composite sample consisting of a mixture of aliquots where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab Sample – An individual sample collected in a period of less than 15 minutes.

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the CWA.

Indirect Discharger means a non-domestic discharger introducing pollutants to a publicly owned treatment works.

Interference means a discharge 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 (CWA), 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 which is not a land application unit, surface impoundment, injection well, or waste pile.

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

Large and Medium municipal separate storm sewer system means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and 40 CFR Part 122); or (ii) located in the counties with unincorporated urbanized

populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships, or towns within such counties (these counties are listed in Appendices H and I of 40 CFR 122); or (iii) owned or operated by a municipality other than those described in Paragraph (i) or (ii) and that are designated by the Regional Administrator as part of the large or medium municipal separate storm sewer system.

Maximum daily discharge limitation means the highest allowable "daily discharge" concentration that occurs only during a normal day (24-hour duration).

Maximum daily discharge limitation (as defined for the Steam Electric Power Plants only) when applied to Total Residual Chlorine (TRC) or Total Residual Oxidant (TRO) is defined as "maximum concentration" or "Instantaneous Maximum Concentration" during the two hours of a chlorination cycle (or fraction thereof) prescribed in the Steam Electric Guidelines, 40 CFR Part 423. These three synonymous terms all mean "a value that shall not be exceeded" during the two-hour chlorination cycle. This interpretation differs from the specified NPDES Permit requirement, 40 CFR § 122.2, where the two terms of "Maximum Daily Discharge" and "Average Daily Discharge" concentrations are specifically limited to the daily (24-hour duration) values.

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 tribe organization, or a designated and approved management agency under Section 208 of the CWA.

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 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 rig 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 Regional Administrator 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 Regional Administrator shall consider the factors specified in 40 CFR §§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 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).

Permit means an authorization, license, or equivalent control document issued by EPA or an "approved" State.

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

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 CFR §122.2).

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 CFR Part 122.

Privately owned treatment works means any device or system which is (a) used to treat wastes from any facility whose operation is not the operator of the treatment works or (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 any facility or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a "State" or "municipality".

This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

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

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

Section 313 water priority chemical means a chemical or chemical category which:

(1) is listed at 40 CFR §372.65 pursuant to Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986);

(2) is present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and

(3) satisfies at least one of the following criteria:

(i) are listed in Appendix D of 40 CFR Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols), or Table V (certain toxic pollutants and hazardous substances);
(ii) are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA at 40 CFR §116.4; or
(iii) are pollutants for which EPA has published acute or chronic water quality criteria.

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, semisolid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, septage, portable toilet pumpings, Type III Marine Sanitation Device pumpings (33 CFR 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 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, 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 EPCRA Section 313, 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 CFR §110.10 and §117.21) or Section 102 of CERCLA (see 40 CFR § 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 CFR §122.1(b)(3).

State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands.

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 which is used for collecting and conveying storm water and which is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. (See 40 CFR §122.26 (b)(14) for specifics of this definition.

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

Toxic pollutants 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 wastewater 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 wastewater 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 Regional Administrator may designate any person subject to the standards for sewage sludge use and disposal in 40 CFR 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 CFR Part 503.

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

Waters of the United States 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 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 the CWA (other than cooling ponds as defined in 40 CFR §423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration 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. (See Abbreviations Section, following, for additional information.)

2. Definitions for NPDES Permit Sludge Use and Disposal Requirements.

Active sewage sludge unit is a sewage sludge unit that has not closed.

Aerobic Digestion is the biochemical decomposition of organic matter in sewage sludge into carbon dioxide and water by microorganisms in the presence of air.

Agricultural Land is land on which a food crop, a feed crop, or a fiber crop is grown. This includes range land and land used as pasture.

Agronomic rate is the whole sludge application rate (dry weight basis) designed:

(1) To provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land; and

(2) To minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the ground water.

Air pollution control device is one or more processes used to treat the exit gas from a sewage sludge incinerator stack.

Anaerobic digestion is the biochemical decomposition of organic matter in sewage sludge into methane gas and carbon dioxide by microorganisms in the absence of air.

Annual pollutant loading rate is the maximum amount of a pollutant that can be applied to a unit area of land during a 365 day period.

Annual whole sludge application rate is the maximum amount of sewage sludge (dry weight basis) that can be applied to a unit area of land during a 365 day period.

Apply sewage sludge or sewage sludge applied to the land means land application of sewage sludge.

Aquifer is a geologic formation, group of geologic formations, or a portion of a geologic formation capable of yielding ground water to wells or springs.

Auxiliary fuel is fuel used to augment the fuel value of sewage sludge. This includes, but is not limited to, natural gas, fuel oil, coal, gas generated during anaerobic digestion of sewage sludge, and municipal solid waste (not to exceed 30 percent of the dry weight of the sewage sludge and auxiliary fuel together). Hazardous wastes are not auxiliary fuel.

Base flood is a flood that has a one percent chance of occurring in any given year (i.e. a flood with a magnitude equaled once in 100 years).

Bulk sewage sludge is sewage sludge that is not sold or given away in a bag or other container for application to the land.

Contaminate an aquifer means to introduce a substance that causes the maximum contaminant level for nitrate in 40 CFR §141.11 to be exceeded in ground water or that causes the existing concentration of nitrate in the ground water to increase when the existing concentration of nitrate in the ground water exceeds the maximum contaminant level for nitrate in 40 CFR §141.11.

Class I sludge management facility is any publicly owned treatment works (POTW), as defined in 40 CFR §501.2, required to have an approved pretreatment program under 40 CFR §403.8 (a) (including any POTW located in a state that has elected to assume local program responsibilities pursuant to 40 CFR §403.10 (e) and any treatment works treating domestic sewage, as defined in 40 CFR § 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 sewage sludge use or disposal practice to affect public health and the environment adversely.

Control efficiency is the mass of a pollutant in the sewage sludge fed to an incinerator minus the mass of that pollutant in the exit gas from the incinerator stack divided by the mass of the pollutant in the sewage sludge fed to the incinerator.

Cover is soil or other material used to cover sewage sludge placed on an active sewage sludge unit.

Cover crop is a small grain crop, such as oats, wheat, or barley, not grown for harvest.

Cumulative pollutant loading rate is the maximum amount of inorganic pollutant that can be applied to an area of land.

Density of microorganisms is the number of microorganisms per unit mass of total solids (dry weight) in the sewage sludge.

Dispersion factor is the ratio of the increase in the ground level ambient air concentration for a pollutant at or beyond the property line of the site where the sewage sludge incinerator is located to the mass emission rate for the pollutant from the incinerator stack.

Displacement is the relative movement of any two sides of a fault measured in any direction.

Domestic septage is either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

Domestic sewage is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

Dry weight basis means calculated on the basis of having been dried at 105 degrees Celsius (°C) until reaching a constant mass (i.e. essentially 100 percent solids content).

Fault is a fracture or zone of fractures in any materials along which strata on one side are displaced with respect to the strata on the other side.

Feed crops are crops produced primarily for consumption by animals.

Fiber crops are crops such as flax and cotton.

Final cover is the last layer of soil or other material placed on a sewage sludge unit at closure.

Fluidized bed incinerator is an enclosed device in which organic matter and inorganic matter in sewage sludge are combusted in a bed of particles suspended in the combustion chamber gas.

Food crops are crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

Forest is a tract of land thick with trees and underbrush.

Ground water is water below the land surface in the saturated zone.

Holocene time is the most recent epoch of the Quaternary period, extending from the end of the Pleistocene epoch to the present.

Hourly average is the arithmetic mean of all the measurements taken during an hour. At least two measurements must be taken during the hour.

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

Industrial wastewater is wastewater generated in a commercial or industrial process.

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 with a high potential for public exposure is land that the public uses frequently. This includes, but is not limited to, a public contact site and reclamation site located in a populated area (e.g., a construction site located in a city).

Land with low potential for public exposure is land that the public uses infrequently. This includes, but is not limited to, agricultural land, forest and a reclamation site located in an unpopulated area (e.g., a strip mine located in a rural area).

Leachate collection system is a system or device installed immediately above a liner that is designed, constructed, maintained, and operated to collect and remove leachate from a sewage sludge unit.

Liner is soil or synthetic material that has a hydraulic conductivity of 1×10^{-7} centimeters per second or less.

Lower explosive limit for methane gas is the lowest percentage of methane gas in air, by volume, that propagates a flame at 25 degrees Celsius and atmospheric pressure.

Monthly average (Incineration) is the arithmetic mean of the hourly averages for the hours a sewage sludge incinerator operates during the month.

Monthly average (Land Application) is the arithmetic mean of all measurements taken during the month.

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.

Other container is either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of one metric ton or less.

Pasture is land on which animals feed directly on feed crops such as legumes, grasses, grain stubble, or stover.

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

Permitting authority is either EPA or a State with an EPA-approved sludge management program.

Person is 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; a measure of the acidity or alkalinity of a liquid or solid material.

Place sewage sludge or sewage sludge placed means disposal of sewage sludge on a surface disposal site.

Pollutant (as defined in sludge disposal requirements) is an organic substance, an inorganic substance, a combination or organic and inorganic substances, or pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could on the basis on information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction) or physical deformations in either organisms or offspring of the organisms.

Pollutant limit (for sludge disposal requirements) is a numerical value that describes the amount of a pollutant allowed per unit amount of sewage sludge (e.g., milligrams per kilogram of total solids); the amount of pollutant that can be applied to a unit of land (e.g., kilograms per hectare); or the volume of the material that can be applied to the land (e.g., gallons per acre).

Public contact site is a land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.

Qualified ground water scientist is an individual with a baccalaureate or post-graduate degree in the natural sciences or engineering who has sufficient training and experience in ground water hydrology and related fields, as may be demonstrated by State registration, professional certification, or completion of accredited university programs, to make sound professional judgments regarding ground water monitoring, pollutant fate and transport, and corrective action.

Range land is open land with indigenous vegetation.

Reclamation site is drastically disturbed land that is reclaimed using sewage sludge. This includes, but is not limited to, strip mines and construction sites.

Risk specific concentration is the allowable increase in the average daily ground level ambient air concentration for a pollutant from the incineration of sewage sludge at or beyond the property line of a site where the sewage sludge incinerator is located.

Runoff is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off the land surface.

Seismic impact zone is an area that has 10 percent or greater probability that the horizontal ground level acceleration to the rock in the area exceeds 0.10 gravity once in 250 years.

Sewage sludge is a solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to:, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in treatment works.

Sewage sludge feed rate is either the average daily amount of sewage sludge fired in all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located for the number of days in a 365 day period that each sewage sludge incinerator operates, or the average daily design capacity for all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located.

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 CFR §122.2.

Sewage sludge unit boundary is the outermost perimeter of an active sewage sludge unit.

Specific oxygen uptake rate (SOUR) is the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in sewage sludge.

Stack height is the difference between the elevation of the top of a sewage sludge incinerator stack and the elevation of the ground at the base of the stack when the difference is equal to or less than 65 meters. When the difference is greater than 65 meters, stack height is the creditable stack height determined in accordance with 40 CFR §51.100 (ii).

State is one of the United States of America, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and an Indian tribe eligible for treatment as a State pursuant to regulations promulgated under the authority of section 518(e) of the CWA.

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.

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

Total hydrocarbons means the organic compounds in the exit gas from a sewage sludge incinerator stack measured using a flame ionization detection instrument referenced to propane.

Total solids are the materials in sewage sludge that remain as residue when the sewage sludge is dried at 103 to 105 degrees Celsius.

Treat or treatment of sewage sludge is the preparation of sewage sludge for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of sewage sludge. This does not include storage of sewage sludge.

Treatment works is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

Unstable area is land subject to natural or human-induced forces that may damage the structural components of an active sewage sludge unit. This includes, but is not limited to, land on which the soils are subject to mass movement.

Unstabilized solids are organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

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

Volatile solids is the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 degrees Celsius in the presence of excess air.

Wet electrostatic precipitator is an air pollution control device that uses both electrical forces and water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

Wet scrubber is an air pollution control device that uses water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

3. 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)	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
pH	A measure of the hydrogen ion concentration. A measure of the acidity or alkalinity of a liquid or material
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)
ug/l	Microgram(s) per liter
WET	"Whole effluent toxicity" is the total effect of an effluent measured directly with a toxicity test.
C-NOEC	"Chronic (Long-term Exposure Test) – No Observed Effect Concentration". 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.
A-NOEC	"Acute (Short-term Exposure Test) – No Observed Effect Concentration" (see C-NOEC definition).
LC_{50}	LC_{50} is 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.
ZID	Zone of Initial Dilution means the region of initial mixing surrounding or adjacent to the end of the outfall pipe or diffuser ports.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Prepared Jointly by the U.S. Environmental Protection Agency and the Maine Department of Environmental Protection.

NPDES PERMIT NUMBER: ME0101851

MAINE WASTE DISCHARGE LICENSE NUMBER: W001475-6C-D-R

PUBLIC NOTICE DATE: **August 17th – September 15, 2017**

NAME AND ADDRESS OF APPLICANT:

Stonington Sanitary District
P.O Box 175
Stonington ME, 04681

COUNTY: **Hancock**

ADDRESS WHERE DISCHARGE OCCURS:

Main Street
Stonington ME, 04681

RECEIVING WATER: **Stonington Harbor/Deer Island Thorofare, East Penobscot Bay**

CLASSIFICATION: **Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Ms. D. Gay Atkinson II
207-367-5161 (Message Only)

Table of Contents

1. APPLICATION SUMMARY

Application

The Stonington Sanitary District (SSD/District/permittee hereinafter) has applied for renewal of a combined National Pollutant Discharge Elimination System (NPDES) permit # ME0101851 and Maine Waste Discharge License (WDL) # W001475-5L-C-R, that was issued on March 14, 2003, and expired on March 14, 2008. The current permit/license (permit hereinafter) is based on a Section 301(h) variance from secondary treatment and authorizes the discharge of up to a 12 month rolling average flow of 0.175 million gallons per day (MGD) of primary treated sanitary wastewater to the Deer Island Thorofare, East Penobscot Bay, Class SB, in Stonington, Maine. See Attachment A of this Fact Sheet for a location map.

Source Description

Sanitary wastewaters received at the treatment facility are generated by residential and commercial entities within the area served by the SSD. The facility does not receive any flows from industrial sources but does receive backwash waters from a local public drinking water treatment facility. The sewer collection system is a separated system and does not have combined sewer overflows.

The facility currently provides a primary level of treatment for flows from 285 on-site septic tanks located on individually and publicly owned lots. The collection system network conveys the septic tank effluent from each lot to a common disinfection tank with chlorination and dechlorination capabilities prior to discharge to the Deer Island Thorofare.

The outfall consists of a ductile iron/PVC discharge pipe measuring 8 inches in diameter that extends out into the receiving waters approximately 600 feet. The outfall discharges at minus 20.0 feet mean low tide elevation according to a plan prepared by Wright-Pierce Engineers, entitled, Stonington Sanitary District, Stonington, Maine, Wastewater Facilities, Wastewater Collection, Outfall Sewer & Treatment Facilities, Ocean Outfall, dated July 11, 1991, and revised May 22, 1995. The permittee is required to maintain the septic tanks according to a regular maintenance schedule. The tanks are periodically inspected to determine malfunctions and the amount of accumulated solids retained in the tanks. Through inspections, an appropriate pump-out frequency is established for each septic tank. The permittee is required to maintain on-site a record of septic tank inspections and maintenance including the amount of solids removed from each tank.

The Stonington treatment facility receives 2,000 gallons (150 gallons & 350 gallons 4x/year) of uranium brine backwash water from the two Stonington Water Co. uranium removal units. See Section h of the fact sheet for a discussion of the backwash water.

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 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.

b. History

Permitting/licensing actions include the following:

June 30, 1977 – The U.S. Environmental Protection Agency (EPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0101851 authorizing the direct discharge of untreated municipal sewage to the Stonington Harbor. NPDES permit #ME0101851 expired on February 15, 1982.

December 22, 1982 - The Maine Department of Environmental Protection (DEP) issued Waste Discharge License #1475 to the SSD that authorized the discharge of untreated municipal wastewaters to the Deer Isle Thorofare until the construction of a waste water treatment facility was completed. The SSD also submitted a final application to the EPA for a variance from secondary treatment requirements (primary treatment only) pursuant to Section 301(h) of the Clean Water Act.

April 26, 1986 – The EPA tentatively denied issuing a Section 301(h) variance based on insufficient information in 12/22/82 application submission.

July 14, 1986 –The Department extended the Time Schedule Variance (variance from statutory water pollution abatement requirements) pursuant to 38 M.R.S.A., Section 451-A.

May 19, 1987 – The EPA denied the SSD's Section 301(h) application based on a missed submission deadline date of May 1, 1987.

April 19, 1988 – The EPA notified the SSD that they would permit them to resubmit their Section 301(h) application to correct deficiencies cited in the 4/26/86 denial.

July 11, 1988 – The Department, on behalf of the SSD, resubmitted the Section 301(h) application to the EPA.

August 25, 1988 – The EPA issued a tentative variance from the secondary treatment requirements of the Clean Water Act (pursuant to Section 301(h) of the Act) to the Stonington Sanitary District.

October 12, 1988 – The EPA issued a public notice for draft NPDES permit #ME0101851 authorizing the discharge of primary treated and disinfected wastewaters from a single outfall pipe to Stonington Harbor. The permit included a schedule of compliance with a deadline of June 30, 1991 to install the treatment facility.

At that time, the SSD was discharging untreated wastewaters to the harbor via 55 overboard discharge pipes. The EPA subsequently determined that a permit could not be issued until full primary treatment was in place.

November 1993 – Construction of the new, separate wastewater collection system was completed and the SSD primary waste water treatment facility commenced operation.

March 30, 1995 – The SSD submitted an application to the EPA for the reissuance of NPDES permit #ME0101851 and an application to the Department for the renewal of WDL #1475.

April 19, 1995 – A meeting between the Department, the EPA, the SSD and their engineering consultant was held in the Department's Eastern Maine Regional Office in Bangor, Maine. The purpose of the meeting was to discuss what the appropriate monthly average flow limit was to be in the NPDES permit and State WDL. It was agreed at the meeting to increase the SSD's monthly average flow limitation from 73,000 gallons per day to 175,000 gallons a day to correspond with the SSD's treatment plant's design flow capacity.

April 25, 1995 – The SSD submitted an application to the Department for the renewal of WDL #1475.

May 18, 1995 – The EPA issued a letter to the SSD confirming that the EPA agreed to the 175,000 GPD limit for the permitting/licensing purposes.

October 23, 1995 – The Department issued WDL renewal #W001475-59-B-R for a five-year term. The monthly average flow limit was established at 175,000 GPD.

January 12, 2001 – The Department received authorization from the EPA to administer the NPDES program for all areas of Maine, other than Indian Lands. Because this permit is being issued under a variance from secondary treatment requirements under the CWA, this modified 301(h) permit must be issued by EPA and, herein, the permit is being proposed for joint issuance with the Maine Department of Environmental Protection and EPA. This permit replaces NPDES permit #ME0101851 last issued by the EPA on June 30, 1977.

June 1, 2001 – The SSD submitted an application to the Department for the renewal of WDL #W001475-59-B-R.

November 29, 2001 – The SSD received a copy of the preliminary draft NPDES permit/ Maine WDL. The SSD submitted written comments to the Department on the preliminary draft permit/license.

November 26, 2002 – The SSD received a copy of the proposed draft NPDES permit/Maine WDL. The SSD submitted written comments to the Department on the proposed draft permit/license.

January 23, 2003 – A meeting between the Department, the EPA (by phone), and the SSD and their consulting engineer and legal counsel (by phone) held a meeting in the Department's Eastern Maine Regional Office to discuss the SSD's comments on the 11/26/02 proposed draft permit/license. The meeting once again focused on what the appropriate monthly average flow limit was to be in the NPDES permit/State WDL.

March 14, 2003 – The EPA and the Department issued a joint NPDES permit/WDL for a five –year term. The permit/license established three tiers of limitations as the SSD wanted assurance from the EPA that the facility was permitted at its design capacity of 175,000 gpd.

December 4, 2007 – The SSD submitted a timely and complete application to the EPA and the Department for renewal of the March 14, 2003 license/permit. The Department accepted the application for processing on December 7, 2007.

January 5, 2011 – Draft permit sent to SSD.

May 5, 2014 - The SSD submitted a 301(h) questionnaire to EPA.

February 25, 2015 – A telephone meeting between the Department, EPA, the SSD and their consulting engineers was held to discuss the SSD's comments on EPA's proposed additions and changes to the draft permit/license. The meeting focused on the design capacity of the SSD system, limits for BOD's and TSS concentrations and potential new sludge rules to be added to the NPDES/WDL.

3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and 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.A., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program,* 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 to 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.A., Section 469 classifies the receiving water at the point of discharge as Class SB water. Maine water quality standards at 38 M.R.S.A., Section 465-B(2) contain the designated uses and specific water quality criteria for Class SB waters.
Designated uses are identified as “recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial processes and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life.”

Federal regulation 40 CFR, Part 125, Subpart G, more specifically Part 125.57(a)(2), states that discharge of pollutants in accordance with such modified requirements [301(h)] will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife, and allows recreational activities in and on the water. The permit must also satisfy the conditions specified in Section 403(C) of the Federal Water Pollution Control Act. See Fact Sheet Attachment C.

4. RECEIVING WATER QUALITY CONDITIONS

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 2014 Integrated Water Quality Monitoring and Assessment Report[1], prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the receiving water DEP Water body ID # 722) as Category 5-B-1(a): Estuarine and Marine Waters Impaired for Bacteria Only - TMDL Required. The MDMR issued an updated Shellfish closure notice for area #38 on March 8, 2017. The MDMR notice states[2]:

> Effective immediately, because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels from the shores, flats and waters of the following Prohibited area(s) without a special MDMR permit:
>
> > *(3) Stonington Harbor (Stonington): north of a line beginning at the southwest point of Moose Island, then running southeast to a red nun #24, then northeast to the northwestern ledge of the Dow Ledges, and then north to the mouth of the Ames Pond Stream.*

[1] https://www1.maine.gov/dep/water/monitoring/305b/2014/draft-appendices.pdf

[2] http://www.maine.gov/dmr/shellfish-sanitation-management/closures/documents/38.pdf

The map shown here as Figure 1 accompanied MDMR's shellfish closure notice.

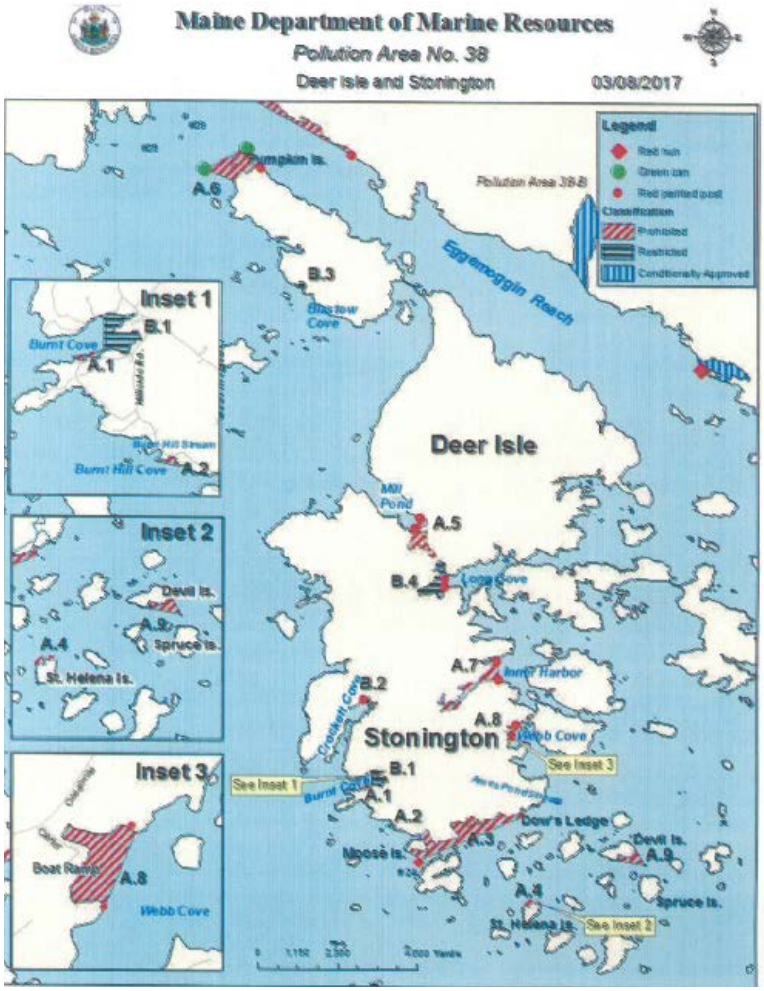

FIGURE 1 - SHELLFISH CLOSURE AREA

Additionally, MDMR 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 8e, compliance with the monthly average and daily maximum limitations for fecal coliform bacteria is intended to ensure the Stonington facility will not cause or contribute to the closure of the shellfish harvesting area.

Monitoring conducted in the summer of 1995 by MDEP divers at a number of 301(h) facility outfalls (including Stonington) indicated that receiving water biological and water quality conditions were consistent with water quality standards.

The conclusion is presented in a document entitled "301(h) Facilities in Maine, Report of 1995 Monitoring Activities," prepared by the Department, dated July 1996 and submitted to EPA, "Water quality, sediment, and photographic information indicates that Stonington and these [301(h)-type] discharges are not causing any significant impact to the receiving waters".

That document concluded that no further ambient monitoring be conducted, and recommended that effluent monitoring be continued. By letter dated February 17, 1995 from the EPA Regional Administrator, the EPA found there would be little risk of adverse impacts to the receiving waters from these discharges provided that the permittee performed effluent monitoring as part of the regular permit conditions.

The MDEP and EPA have since agreed that SCUBA diving inspections of 301(h) outfalls are too dangerous due to the swift currents generally found in these receiving waters.[3] EPA and the Department have made the determination that based on the sampling to date and past effluent monitoring data, the discharge complies with 40 CFR, §125.57(a)(2).

MRSA §465-B(B) states that "the dissolved oxygen content of Class SB waters must be not less than 85% of saturation".

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.[4]This is consistent with the findings of the previously mentioned Maine DEP SCUBA survey of the Stonington outfall and vicinity.

5. WAIVER OF SECONDARY 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_5, TSS and pH.

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[3] SCUBA -Self Contained Underwater Breathing Apparatus

[4] 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

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 Stonington on August 25, 1988, 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.

Federal regulation 40 CFR 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 made a determination that the scope of effluent limitations and monitoring requirements in Special Condition B1and B2 of this permit are sufficient to provide the necessary information to study the effects of the discharge on the receiving waters.

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

6. ENDANGERED SPECIES ACT

As the federal agency charged with authorizing the discharge from this facility, EPA is in communication with NOAA Fisheries and the United States Fish and Wildlife Service (USFWS) as part of EPA's consultation responsibilities under section 7 (a)(2) of the Endangered Species Act (ESA) for potential impacts to federally listed species.

EPA has structured the proposed limits to be sufficiently stringent to assure protection of Water Quality Standards for both for aquatic life protection and human health protection. The effluent limits established in this permit ensure the protection of aquatic life and maintenance of the receiving water as an aquatic habitat. EPA finds that adoption of the proposed permit is not likely to adversely affect any threatened or endangered species or its critical habitat.

The National Marine Fisheries Service (NMFS) has authority for marine species. USFWS and NMFS share federal regulatory authority for the protection of anadromous Atlantic salmon (*Salmo salar*) in Maine waters. Atlantic salmon which are listed as endangered, may transit this general area as smolts or adults, but the habitat within the Deer Island Thorofare is not likely to attract Atlantic salmon, or delay their migration. The Stonington discharge is not located within designated shortnose sturgeon habitat, nor is it an area where endangered shortnose sturgeon are expected to routinely inhabit.

While the potential exists for federally-listed marine species to be present, the likelihood of whale species to inhabit or even transit this shallow and narrow passage appears remote. Similarly, it appears unlikely that other federally-listed species would routinely inhabit this area, although their presence is possible. The outfall discharge pipe measures 8 inches in diameter and extends out into the receiving waters approximately 600 feet. The outfall discharges at minus 20.0 feet mean low tide. The immediate dilution is in excess of 1000:1. A SCUBA survey demonstrated no apparent difference in the biota found in close proximity to the outfall and control areas.

Because of the low flow volume of the discharge and because the wastewaters are not known to contain pollutants at concentrations which could be toxic to aquatic life, and because the discharge is not released directly to a Maine Distinct Population Segment (DPS) Atlantic Salmon River, EPA has determined that the renewal of the existing NPDES permit for the discharge of treated domestic wastewater is not likely to adversely affect listed species or their critical habitat under NMFS jurisdiction.

EPA and the Department will continue consultation with NMFS if new information pertaining to the facility arises[5].

7. EFH (ESSENTIAL FISH HABITAT)

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Services (NMFS) if EPA's action or proposed actions that it funds, permits, or undertakes, "may adversely impact any essential fish habitat." 16 U.S.C. § 1855(b). The Amendments broadly define "essential fish habitat" as: "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. 16 U.S.C. § 1802 (10). Adversely impact means any impact which reduces the quality and/or quantity of EFH. 50 C.F.R. § 600.910 (a). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. Essential fish habitat is only designated for 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. Description of Proposed Action

This proposed action is the reissuance of an existing NPDES permit authorizing the discharge of primary treated waste water to the marine waters located South of Stonington.

Please see the description of outfall location in Section 7 of this document (ESA). The maximum discharge (monthly average) is 175,000 gallons per day. Please review earlier sections of this Fact Sheet for additional information related to the discharge.

[5] See April 5, 2017 letter from EPA to Kimberly Damon-Randall NOAA'S National Marine Fisheries Service Protected Resources Division and April 12, 2017 response from Kimberly Damon-Randall.

EFH Species

The discharge location (N 44º 09'10.67, W 68º 39' 56.60) falls within the EFH designation for the 10-minute square shown in Table 1:

Table 1 – EFH Designations

Boundary	North	East	South	West
Coordinate	44° 10.0 N	68° 30.0 W	44° 00.0 N	68° 40.0 W

Species and Life Stage Designation	Eggs	Larvae	Juveniles	Adults
Atlantic cod (Gadus morhua)				X
Atlantic halibut (Hippoglossus hippoglossus)	X	X	X	X
Atlantic sea scallop (Placopecten magellanicus)	X	X	X	X

Key: X = Designated as EFH for this species and life stage.

Analysis of Effects and Opinion on Probable Impacts

Due to the low flow of the discharge, the relatively high dilution and strong currents in the receiving waters, and the low toxicity potential of the waste water being discharged, EPA believes that impacts to EFH from this discharge are minimal, and that compensatory mitigation is not warranted. Should new information become available that changes the basis for this opinion, EPA will re-initiate consultation with NMFS.

8. EFFLUENT LIMITATIONS

a. Effluent Flow

The SSD 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.

In order 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 reasonable potential calculations is encompassed by the references to "condition" and "limitations" in Sections 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 and B.2 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 previous permit established a 12-month rolling average flow limitation of 175,000 gallons per day (0.175 MGD) based on the SSD's system design flow capacity. The 1988 301(h) waiver document issued by the EPA specified a design flow of 73,000 gpd which is the value the SSD cited as the "estimated" design capacity of their, yet to be installed, system in their application for a Section 301(h) waiver. In April of 1995, the SSD submitted additional information to the EPA and the Department that indicated the initial application submitted to the EPA was in error regarding flow. The SSD conducted a more comprehensive evaluation of the potential population growth within the District's boundaries and the capacity of the system and determined the system was capable of collecting and treating up to the Design Flow Capacity of 175,000 gpd. The SSD considered this additional information submitted to the EPA as a correction to the original application.

Table 2 - Record of the 12-Month Rolling Average Flow Values in gpd

Year	2009	2010	2011	2012	2013	2014	2015	2016
Jan	28,093	26,428	22,390	23,926	23,619	34,172	44207	30547
Feb	26,199	26,285	22,364	23,983	24,013	34,325	44678	30800
Mar	25,681	26,665	23,008	23,733	24,559	34,868	45493	29136
Apr	26,067	25,979	23,743	22,231	24,695	35,718	45574	27202
May	26,220	25,639	24,356	22,956	24,480	35,778	46858	25476
Jun	27,470	24,415	24,355	24,111	24,976	36,145	46026	22224
Jul	27,903	24,133	23,950	24,848	27,559	36,082	43001	20442
Aug	28,518	22,598	24,319	25,083	29,480	37,002	40144	20306
Sep	24,846	22,678	24,490	24,655	31,720	37,453	37657	19882
Oct	25,460	22,464	24,726	24,625	32,144	39,202	35584	19931
Nov	25,257	23,650	23,989	23,708	32,964	40,817	31466	20955
Dec	24,930	23,688	23,945	23,949	33,039	44,645	30547	21701
Min	24,846	22,464	22,364	22,231	23,619	34,172	30547	19882
Avg.	26,387	24,552	23,803	23,984	27,771	36,952	40936	24050
Max	28,518	26,665	24,726	25,083	33,039	44,645	46858	30800

Due to high inflow and infiltration (I/I) rates during wet weather, the SSD requested that the EPA and the Department establish the flow limit as a 12-month rolling average limitation as provided by federal regulation 40 CFR, §125.60.

The previous permit established the flow limit as such. The 12-month rolling average permit limits are carried forward in this draft permit. The draft permit will be requiring the reporting, without a limit, of the monthly average flow to allow the tracking of wet weather flows. The draft permit also requires the permittee to address excessive I/I.

This permitting action is carrying forward the model of tiered permit limits from the previous permit for flow limitations and corresponding BOD_5 and TSS limits. The previous permit contained three tiers whereas this draft permit contains two (see table below).

Table 3 – Flow Tiers in Previous and Draft Permit

Tier	Previous Permit Tiers	Draft Permit Tiers
I	≤100,000 gpd	≤106,000 gpd
II	≤135,000 gpd	≤175,000 gpd
III	≤175,000 gpd	

Tier I shall be based on a 12- month rolling average flow of up to 106,000 instead of 100,000 as currently permitted. The highest actual 12- month rolling average recorded in the 8 calendar years 2009-2016 is 46,858 gpd which occurred in May of 2015.

In 1995 Olver Associates conducted a study[6] of the capacity of all the septic tanks then on the system and added an allowance for infiltration/inflow to arrive at the existing design flow of the treatment system (106,000 gpd). They also projected the flow of all potential users of the system if they are connected. See Figure 2 on next page.

The District has a contractual obligation to accept connection from any property within the boundaries of the district. Maximum build out is estimated to be 175,000 GPD. The flow of 175,000 GPD also represents the maximum capacity of the SSD's chlorine contact chambers.

Flow limits for municipal systems are based on the design flow (40 CFR §122.45(b)(1) which EPA considers to be the combined capacity of the septic tanks in use plus non-excessive I/I, which by regulation (40 CFR §35.2005(b)(16)) is less than 275 gallons per capita per day. Therefore, the revised Tier I flow limit will be based on the 1995 system capacity report summary found on the next page.

The less than 6% change in the Tier I flow limit and associated BOD_5 and TSS mass limitations meet an exception to backsliding as defined at 40 CFR §144(l)(B)(2) for a "technical mistake" since the correct discharge capacity for the Tier 1 limits is 106,000 gpd.

The Tier II flow limit shall be a 12-month rolling average limit of $\leq$175,000 gpd.

[6] William M. Olver, Olver Associates Inc. letter report to Stephen Austin, Stonington Sanitary District, March 20, 1995.

OLVER ASSOCIATES INC.

Mr. Stephen Austin, Chairman
March 20, 1995
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STONINGTON'S WASTEWATER GENERATION POTENTIAL

WASTEWATER SOURCE	POTENTIAL FLOW* (GPD)
SEWERED AREA CONNECTED USERS	
Connected residential users	64,530
Connected commercial users	15,505
Connected institutional users	3,335
Connected school users	6,000
Groundwater infiltration design allowance	16,320
Connected user wastewater generation potential	105,690
SEWERED AREA UNCONNECTED USERS	
Unconnected residential users	3,420
Unconnected commercial users	360
Unconnected institutional users	350
Unconnected user wastewater generation potential	4,130
VACANT LOT WASTEWATER GENERATION POTENTIAL	10,000
IDENTIFIED GROWTH POTENTIAL FROM SURVEY	
Residential flow growth potential	8,100
Commercial flow growth potential	45,330
Institutional flow growth potential	2,000
Total flow growth potential	55,430
Total Stonington sewered areas future flow potential*	175,250

* Based on minimum Maine State Plumbing Code flows for Stonington user units identified in District's user survey. (Results are attached).

FIGURE 2 – Stonington's Wastewater Generation Potential

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.

The Maine DEP determined the following dilutions using a CORMIX model. The acute and chronic dilution factors are ≥1,000:1 and the harmonic mean dilution factor is ≥3,000:1[7]

c. Biochemical Oxygen Demand (BOD_5) 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_5 and 30% of the TSS material in the treatment works influent (40 CFR §125.58(r)). The Department considers a thirty percent (30%) removal of BOD_5 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. EPA will require 50% removal of TSS consistent with Maine requirements. The percent removal requirements were established in the 2003 permitting action and are being carried forward.

The decentralized method of the BVC treatment system does not allow for consistent influent sampling for BOD or TSS. It is not practical to measure the influent into each septic system from each household. Compliance with the percent removal limits was based on an assumed influent (into the individual septic tanks) concentration of 350 mg/L for BOD_5 and 325 mg/L for TSS.

These assumed values fall within the range of values found in the publications entitled EPA Design Manual, Onsite Wastewater Treatment and Disposal Systems (EPA 625/1-80-012), dated October 1980, table 4-3 entitled "Characteristics of Typical Residential Wastewater" and Wastewater Engineering, Treatment, Disposal, and Reuse, Third Edition, by Metcalf & Eddy, Inc., 1991, Page 109, Table 3-16, "Typical Composition of Untreated Domestic Wastewater." Percent removal is calculated as follows:

$$\text{Percent removal} = \frac{(\text{(average monthly influent concentration)} - \text{(average monthly effluent concentration)})}{100} \times 100$$

[7] Maine DEP COMIX Model run Data Sheet dated 11/15/96, From-Gregg Wood

The 2003 mass limits were based on the effluent concentration limits and the authorized flow of 175,000 gpd.
The permit/license established a 12-month rolling average technology-based mass and concentration limits for BOD_5 and TSS. The effluent BOD_5 concentration limits were based on an assumed influent concentration of 350 mg/L and a 30 percent removal. The effluent TSS concentration limits were based on an assumed influent concentration of 325 mg/L and a 50 percent removal.

BOD_5 12-Month Rolling Average Limit	TSS 12-Month Rolling Average Limit
$\frac{(350\ mg/L - X\ mg/L)*(100\%)}{(350\ mg/l)} = 30\ \%$	$\frac{(325\ mg/L - X\ mg/L)*(100\%)}{(325\ mg/l)} = 50\ \%$
X = 245 mg/l	X = 163 mg/l

Biochemical oxygen demand (BOD_5) and total suspended solids (TSS) Mass Limits

The twelve-month rolling average mass limits for BOD_5 were derived as follows:

Tier I – Flow limitation of 106,000 gpd (0.106 MGD)

BOD_5: (0.106 MGD)(8.34)(245 mg/L) = 217 lbs./day
TSS: (0.106 MGD)(8.34)(163 mg/L) = 144 lbs./day

Tier II — Flow limitation of 175,000 gpd (0.175 MGD)

BOD_5: (0.175 MGD)(8.34)(245 mg/L) = 358 lbs./day
TSS: (0.175 MGD)(8.34)(163 mg/L) = 238 lbs./day

A review of the DMR data for the period January, 2012 –December, 2016 inclusively, shows that the facility has the potential to comply with the proposed permit limits on a 12-month rolling average basis. The Maximum reported BOD_5 value during this period was 61 lbs./day and the maximum reported TSS value was 18 lbs./Day. See Fact Sheet Attachment B.

The sampling frequency in the draft permit is 1/Week. The once per week monitoring for BOD_5 and TSS is based on a BPJ determination by the EPA and the Department given the size and type of treatment facility.

d. Settleable solids (SS)

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.

Pathogenic organisms naturally present in sewage may be adhered to solid particles, which might afford protection from inactivation by a disinfectant (chlorine). The removal of solids and resultant disinfection efficiency makes increased settleable solids monitoring prudent. The previous permitting action established monthly average and daily maximum reporting requirements with a 3/Week monitoring frequency when chlorinating. That frequency is retained in the draft permit. The Range of the monthly average values for settleable solids from January 2012 through December 2016 was 0.1-0.3 ml/L with a mean of 0.11 ml/L and the range of daily maximum values is 0.03-0.6 ml/L, with the mean being 0.15 ml/L. The mean settleable solids values are normal for primary treatment.

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.[8]

Enterococci

Maine water quality standards use enterococci as indicator organisms for protection of estuarine and marine recreational waters (38 MRSA Ch. 3 §465). Because contact recreation occurs largely in the summer months, the enterococci criteria are applied seasonally. *Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geo-metric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters.*[9] The current permit does not have enterococci limits. The draft 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 proposed in the draft permit are a monthly geometric mean of 8 cfu/100 ml and a maximum daily limit of 54 cfu/100 ml. The monitoring frequency shall be weekly.

[8] Maine Statewide Bacteria TMDL (Total Maximum Daily Loads) August 2009 Report # DEPLW-1002

[9] 38 MRSA Ch.3 §465.3(B)

Fecal Coliform

The Maine water quality standards for Class SB waters 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.[10] .

The current permit applied the fecal coliform limits seasonally (May 15 – September 30). The draft permit requires that fecal coliform limits be met year-round consistent with year-round harvesting of shellfish and the Maine water quality standard for protection of shellfishing which is year round. The MDMR Closure Order Number 38 found on page 8 of the Fact Sheet does not remove the designated use of *harvesting of shellfish*, nor EPA's responsibility to set limits for total coliform bacteria, or other indicator organisms, in the draft permit to protect that use.

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 2013 Revision. EPA will apply the same bacteriological standards from this Guidance Document, as used by the MDMR in the protection shellfish resources[11] as permit limits.

> The fecal coliform median or geometric mean MPN or MF (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[12] (mTEC) of: 31 CFU per 100 ml for a MF [membrane filter] (mTEC) test.

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[10] 38 MRSA Ch. 3 §465-B(2). Standards for classification of estuarine and marine waters-Class SB waters

[11] National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish 2013 Revision Section 02. Bacteriological Standards. Page 42. https://www.fda.gov/downloads/food/guidanceregulation/federalstatefoodprograms/ucm415522.pdf

[12] Method 9222 D-1997 (Membrane filter -CFU) as found in Standard Methods for the Examination of Water and Wastewater, 22nd Edition, E.W. Rice, R.B. Baird, A.D. Eaton, L.S. Clesceri, American Public Health Association, American Water Works Association, Water Environment Federation.

The permittee uses the Standard Method 9222-D-1997- Thermotolerant (Fecal) Coliform Membrane Filter Procedure. This is the closest method to that used by MDMR that is approved for wastewater under 40 CFR §136

Fecal Coliform Bacteria are limited in the current permit to average and daily maximum concentration limits of 15 colonies/I00 ml and 50 colonies/I00 ml, respectively. These limits were based on DEP's interpretation of the 2005 National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish. The draft permit limits of 14 colonies/I00 ml and 31 colonies/I00 ml are 2013 National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish.

The average of the seasonal monthly geometric mean values for fecal coliform from January 2012 through November 2016 is 5/100 ml, with a reported maximum value of 15/100ml. The reported average of daily maximum values 10/100 ml and highest reported value of 45/100 ml. The data indicates that the facility is capable of meeting the new limits.

The monitoring frequency requirement of once per week is based on DEP guidance for POTWs.

f. Total residual chlorine (TRC)

Chlorine compounds resulting from the disinfection process can be extremely toxic to aquatic life. Maine's chlorine criteria for protection of aquatic life in salt water are 13 ug/L for acute exposure and 7.5 ug/L for chronic exposure.

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

Municipal wastewater treatment facilities treating only to primary, require stronger disinfection measures because of shading of bacteria in the higher solids content found in such effluent. For this reason, MEDEP does not hold Stonington to the limits of 0.3 mg/L and 0.1 mg/L. Department's BPT limit of 1.0 mg/L is applicable.

Water quality based effluent limits may be calculated as shown below, however, as stated above, since the technology-based limit is more stringent the draft permit contains a TRC limit of 1.0 mg/L. EPA shall require year-round disinfection to protect shellfish uses.

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	13 ug/L	7.5 ug/L	1000:1	1000:1	79.0 mg/L	7.5 mg/L

Example calculation: Acute 0.013 mg/L (1000) = 13.0 mg/L
Chronic 0.0075 mg/L (1000) = 7.5 mg/L

The 1.0 mg/l maximum daily limit is maintained during this permit reissuance to be consistent with Maine CWA Section 401 permit certification requirements[13]. The monitoring frequency remains daily. A review of Discharge Monitoring Reports between January 2012 through November 2016 shows the mean value for TRC during this period was 0.42 mg/l, with a maximum value of 1.0 mg/l. The data indicates that the facility is capable of meeting the 1.0 mg/l limit.

g. Compliance Schedules for Bacteria and Total Residual Chlorine

The SSD will need to make operational changes to meet the new year round fecal coliform limits. SSD staff will also need to purchase and learn to operate enterococci testing equipment. Prior to this permit, chlorination was applied seasonally from May 15th through September 15th. SSD will need to provide disinfection year-round, requiring additional staffing, additional chemicals and time to optimize chlorination/de-chlorination equipment during winter months. The schedule will allow SSD to monitor enterococci bacteria without limits for one year from the effective date of the permit. For 12 months from the effective date of the permit only, SSD will have an interim fecal coliform limits equal to the current seasonal (May 15th through September 15th) fecal coliform limits of 15 colonies/I00 ml and 50 colonies/I00 ml as a monthly average and daily maximum concentration, respectively. Twelve months from the effective date of the permit, SSD will need to comply with all final permit limitations.

h. pH

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.

[13] Maine DEP Memorandum from John Moulton (DEP) to EPA, September 24, 1992

EPA and MDEP recognize there is rapid dilution of the effluent in establishing the pH range limits of 6.0–9.0 standard units. Department rule, Chapter 525(3)(III)(c) states that for publicly owned treatment works, the effluent values for pH shall be maintained within the limits of 6.0 to 9.0. The pH limits in this draft permit are consistent with the secondary treatment standards for pH found in 40 CFR §133.102(c) which are also of 6.0 to 9.0 standard units. The monitoring frequency of 1/Day is carried forward from the previous permit.

i. Uranium

Uranium is a naturally occurring element in groundwater. The Stonington Sanitary District receives 1,000 gallons annually (150 gallons & 350 gallons 2x/year) of uranium brine backwash water from the Stonington Water Co, the local public drinking water supplier. The concentration of uranium at the point of discharge from SSD will be less than the naturally occurring sea water concentration of 3 µg/L[14]. See the following calculation.

500 gallons of filter backwash (2 x year)
Concentration of Ur in backwash brine, 15 ug/L
Mixed with >20,000 gpd actual plant flow.

The internal dilution = $\frac{20{,}000 \text{ gallons}}{500 \text{ gallons}} = 40{:}1$

$\frac{15 \text{ ug/L}}{40} = 0.375 \text{ ug/L}$

There are no surface water marine criteria for uranium and the calculated effluent concentration is >0.4 ug/l at the point of discharge, well below the 3 ug/L naturally occurring uranium concentration in seawater. Based on the low discharge concentration compared to naturally occurring levels in seawater, there is no reasonable potential for the discharged of uranium from SSD to cause or contribute to some exceedance state water quality standards.

[14] The uranium concentration is relatively uniform overall in ocean basins at 3 µg/L, Natural Uranium and the Environment, Stitut De Radioprotection Et De Sûreté Nucléaire, August 9, 2012

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

Maine water quality standards in 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.

Though the facility has never conducted WET or chemical specific testing pursuant to Department Rule Chapter 530, the Department has made the determination the SSD facility is not a new discharge nor has it substantially changed since issuance of the previous permit/license. Therefore, the SSD qualifies for the waiver from the Chapter 530 testing requirements. Chapter 530 §(2)(D) states:

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.

Added during this permit reissuance is Special Condition I, 06-096 CMR 530(D)(2)(4) Statement for Reduced/Waived Toxics Testing, which requires the permittee to file an annual certification with the Department.

It is noted however, that if future WET testing results indicates the discharge exceeds critical water quality thresholds this permit will be reopened pursuant to Special Condition K, *Reopening of Permit for Modification*, of this permit to establish applicable limitations and monitoring requirements and require the permittee to submit a toxicity reduction evaluation (TRE) pursuant to Department rule, Chapter 530(3)(c).

The permittee must also comply with the provisions of 40 CFR § 122.44 which require notification to EPA of any new or increased discharge of potentially toxic pollutants by the permittee.

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 SB classification.

10. SEPTAGE INFORMATION AND REQUIREMENTS

Maine regulates sludge and septage under Department Regulations Chapter 400 et seq. Approximately 75-80 thousand gallons per year of liquid septage from the SSD septic tanks is applied to a 2.5-acre Department-approved land spreading site on the island. DEP set a limit of 98,724 gallons/yr. for the site.

Municipal sludge is regulated under Federal requirements found at 40 CFR Part 503. These requirements are self-implementing by the permittee. The permittee must keep records onsite for 5 years for inspection by EPA or the Department upon request.

The permittee must stay apprised of all regulations applicable to their practice for the use or disposal of septage. The draft permit includes a summary of records to be kept by the permittee related to the current land application of sludge. If the ultimate septage disposal method changes, the permittee must notify EPA and DEP and the requirements pertaining to septage monitoring and other conditions would change accordingly.

11. OPERATIONS AND MAINTENANCE FOR THE TREATMENT PLANT

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

Significant I/I in a collection system may reduce the efficiency of disinfection. It greatly increases the potential for sanitary sewer overflows (SSO).

During the period of 6 years (2009-2014) the daily maximum flows ranged from 18,000 gpd to 282,800 gpd, almost a 16-fold increase from the minimum to the maximum. Many of the homes are used seasonally, predominantly during the summer. The seasonal population fluctuations account for a portion of the disparate flow range, the remainder being from I/I.

The Stonington collection system connects primary treated wastewater (from individual septic systems) to disinfection facilities and the outfall. This process is different from conventional treatment systems where influent is treated at the end of the collection system. This complicates the measurement of treatment efficiency by having the collection system between the influent and effluent sampling points.

The significant I/I in the collection system acts in the same manner as internal dilution within a treatment process. 40 CFR §122.45(f)(1)(iii) states in part that; permit conditions [shall] ensure that dilution will not be used as a substitute for treatment. Given enough I/I in the system, both concentration and percent removal limits could be met entirely by internal dilution of the waste stream and without any treatment.

40 CFR §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 nonexcessive.[15]

For the above stated reasons, the permit requires an ongoing program to address and remove I/I from the system. EPA has incorporated Department Wet Weather Flow Management Plan requirements in the draft permit as they are necessary to proper operation of the WWTF.

12. PUBLIC COMMENTS PERIOD AND PROCEDURES FOR FINAL DECISION

Notice of the application being filed with the EPA and the Department for renewal of the permit was placed in the Island Advantages Newspaper on or about December 1, 2007 consistent with Maine application requirements.

The draft permit public notice will be placed on the EPA Region I NPDES website at: http://www.epa.gov/region1/npdes/me.html.

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

In addition, interested parties previously identified will receive notice of availability of the draft permit, fact sheet and tentative 301(h) decision document.

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the U.S. EPA, Office of Ecosystem Protection, 5 Post Office Square, Suite 100, Boston, Massachusetts 02109-3912, to the contact named in Section 12 below, and to the Department at the address shown in Section 12 below. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing.

Public hearings may be held after at least thirty-day public notice whenever the Regional Administrator finds that response to this notice indicates a significant public interest. In reaching a final decision on the draft permit, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office

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

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 Land & Water Quality
Division of Water Quality Management
State House Station #17
Augusta, ME. 04333-0017
Phone : 207-287-7693
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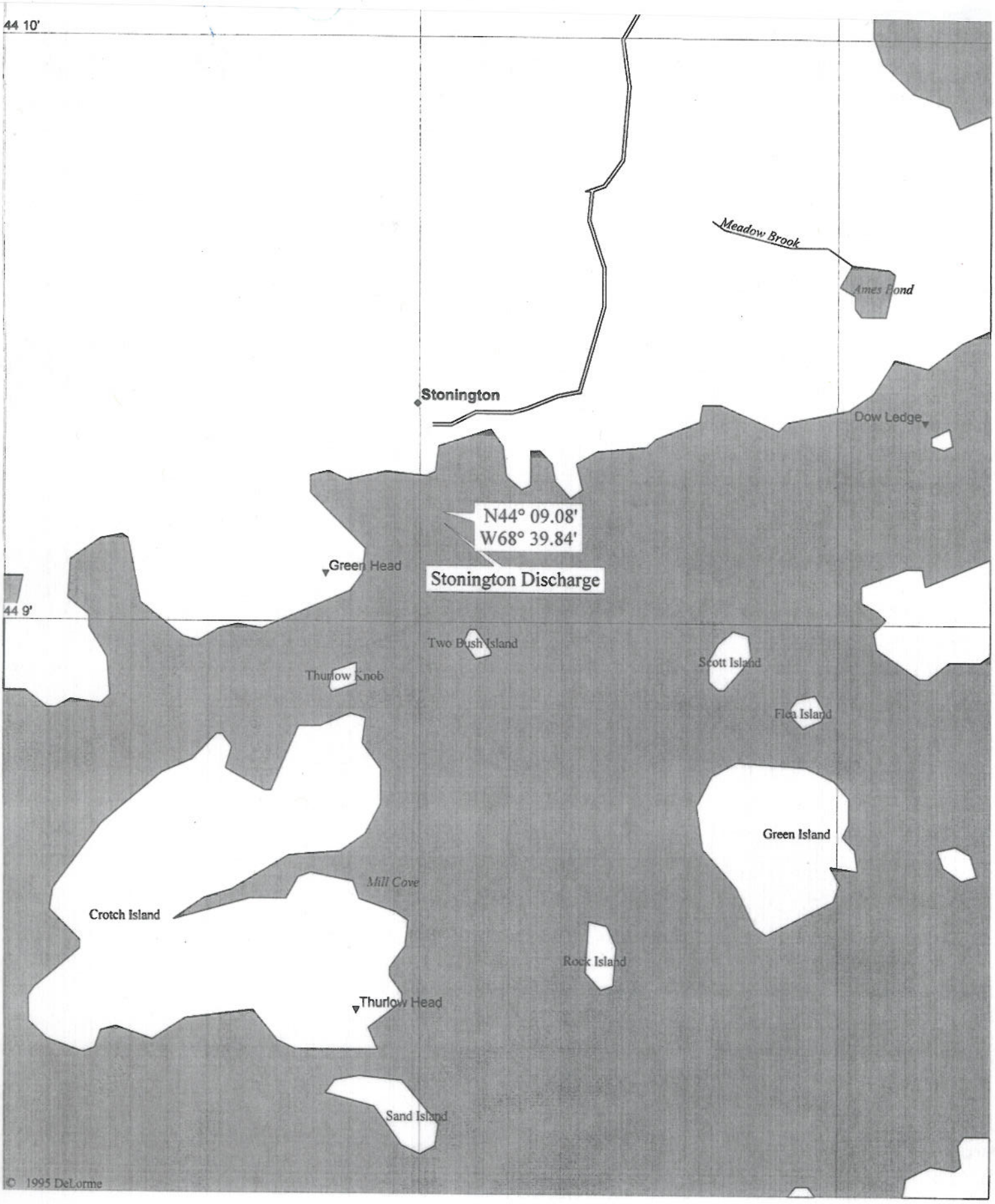
Doug Corb
U.S. Environmental Protection Agency
Mail Code – OEP06-4
5 Post Office Square – Suite 100
Boston, MA 02109-3912
Phone : 617-918-1565
Email : corb.doug@epa.gov

Attachment A – Stonington SD Discharge



Stonington Sanitary District - ME0101851 FACT SHEET ATTACHMENT B
Discharge Monitoring Report Data: January 2012 through December 2016

Data Summary

BOD_5	12 Month Rolling Average lb/d	Daily Maximum lb/d	12 Month Rolling Average mg/l	Daily Maximum Mg/l
Minimum	23	13	92	113
Average	41	63	207	165
Maximum	61	278	320	197
Limit	204	Monitor	Monitor	Monitor

TSS	12 Month Rolling Average lb/d	Daily Maximum lb/d	12 Month Rolling Average mg/l	Daily Maximum Mg/l
Minimum	6.4	4	37	38
Average	12	17	55	46
Maximum	18	55	94	68
Limit	136	Report	Report	Report

Parameter	12 Month Rolling Average Flow gpd	Settleable Solids Daily Maximum ml/l	pH Daily Minimum SU	pH Daily Maximum SU
Minimum	19882	0.03	6.0	6.8
Average	31015	1.5	6.4	7.3
Maximum	46858	0.6	7.1	7.7
Limit	100000	Report	6.0	9.0

Parameter	Total Chlorine Residual Daily Maximum mg/l	Fecal Coliform Monthly Average #/100 ml	Fecal Coliform Daily Maximum #/100 ml
Minimum	0	2.6	2.9
Average	0.44	4.8	9.9
Maximum	1.0	15	45
Limit	1.0	15	50

Stonington Sanitary District - ME0101851 FACT SHEET ATTACHMENT B
Discharge Monitoring Report Data: January 2012 through December 2016

Five Day Biochemical Oxygen Demand – BOD_5				
Monitoring Period End Date	12 Month Rolling Average lb/d	Daily Maximum lb/d	12 Month Rolling Average mg/l	Daily Maximum Mg/l
1/31/2012	31	27	176.9	175.1
2/29/2012	32	24	207	182.1
3/31/2012	32	25	214.5	184
4/30/2012	33	125	273.8	186.5
5/31/2012	35	43	260	196.8
6/30/2012	39	278	205.5	192.7
7/31/2012	39	61	260.3	186.5
8/31/2012	37	61	247.8	177
9/30/2012	34	16	92	168
10/31/2012	33	23	192.8	161.3
11/30/2012	32	29	232.8	164.8
12/31/2012	32	27	191.2	159.9
1/31/2013	32	20	172.9	159.4
2/28/2013	32	18	148.3	156.2
3/31/2013	32	18	131.6	153.8
4/30/2013	28	75	175.1	149.9
5/31/2013	29	95	253.6	148.8
6/30/2013	25	66	263.8	150
7/31/2013	30	124	257.5	152.2
8/31/2013	35	105	269	158.8
9/30/2013	42	223	241.9	166.7
10/31/2013	46	79	297.3	178.3
11/30/2013	47	50	248.1	177.8
12/31/2013	48	42	154.9	177.5
1/31/2014	51	180	162.3	178.1
2/28/2014	52	26	185.8	179.1
3/31/2014	52	22	170.8	180.7
4/30/2014	54	25	155.1	177.5
5/31/2014	52	87	267.9	169.8
6/30/2014	57	80	274	183.2

Stonington Sanitary District - ME0101851 FACT SHEET ATTACHMENT B
Discharge Monitoring Report Data: January 2012 through December 2016

Five Day Biochemical Oxygen Demand – BOD_5				
Monitoring Period End Date	12 Month Rolling Average lb/d	Daily Maximum lb/d	12 Month Rolling Average mg/l	Daily Maximum Mg/l
7/31/2014	57	125	267	184.7
8/31/2014	59	167	242.2	183.4
9/30/2014	60	138	268.5	186.1
10/31/2014	60	97	268.3	181.3
11/30/2014	61	98	177.3	173.8
12/31/2014	61	49	154.4	170.9
1/31/2015	59	47	167.7	171.1
2/28/2015	59	29	209.7	172.6
3/31/2015	59	27	139.5	169.3
4/30/2015	59	25	137.5	168.9
5/31/2015	59	138	319.5	167.3
6/30/2015	59	97	188	159.5
7/31/2015	57	74	190.5	155
8/31/2015	50	46	223.8	153
9/30/2015	43	34	199.3	148
10/31/2015	40	31	311.4	146.2
11/30/2015	38	68	183.3	148.7
12/31/2015	36	13	133.6	150.1
1/31/2016	34	13	150.5	148.8
2/29/2016	33	16	137.8	144
3/31/2016	32	21	145.5	145
4/30/2016	32	17	162.3	147.5
5/31/2016	28	26	228	146
6/30/2016	25	44	271	151
7/31/2016	23	65	240	153
8/31/2016	23	53	213	154
9/30/2016	23	41	267	156
10/31/2016	24	44	214	153
11/30/2016	23	36	107	148
12/31/2016	23	26	146	113

Stonington Sanitary District - ME0101851 FACT SHEET ATTACHMENT B
Discharge Monitoring Report Data: January 2012 through December 2016

Total Suspended Solids - TSS				
Monitoring Period End Date	12 Month Rolling Average lb/d	Daily Maximum lb/d	12 Month Rolling Average mg/l	Daily Maximum Mg/l
1/31/2012	11	5	40	47.9
2/29/2012	11	6	48	47
3/31/2012	11	7.7	71	47.4
4/30/2012	9	32	80	47.3
5/31/2012	8	9	51.4	45.9
6/30/2012	8	21	41	44
7/31/2012	8	13	57	42.9
8/31/2012	8	14	58	41.7
9/30/2012	8	17	94	44.2
10/31/2012	8	13	56	45.2
11/30/2012	8	9	86	46.2
12/31/2012	9	9	58	47.8
1/31/2013	9	12	50	48.7
2/28/2013	9	5	45	48.5
3/31/2013	9	7	46	47.8
4/30/2013	9	26	54	47.5
5/31/2013	9	16	60	47.7
6/30/2013	9	12	47	47.4
7/31/2013	10	38	93.3	49.1
8/31/2013	11	24	56	48.6
9/30/2013	12	36	59.2	46.2
10/31/2013	12	16	76.8	47.1
11/30/2013	13	14	76.8	47.3
12/31/2013	13	14	38	45.6
1/31/2014	14	55	50	45.2
2/28/2014	14	6	41.5	45
3/31/2014	14	18	53.3	46.1
4/30/2014	14	9	45.3	45.1
5/31/2014	13	19	51	44.7
6/30/2014	15	19	61.6	47.6

Stonington Sanitary District - ME0101851 FACT SHEET ATTACHMENT B
Discharge Monitoring Report Data: January 2012 through December 2016

Total Suspended Solids - TSS				
Monitoring Period End Date	12 Month Rolling Average lb/d	Daily Maximum lb/d	12 Month Rolling Average mg/l	Daily Maximum Mg/l
7/31/2014	14	55	50	45.2
8/31/2014	14	6	41.5	45
9/30/2014	14	18	53.3	46.1
10/31/2014	14	9	45.3	45.1
11/30/2014	13	19	51	44.7
12/31/2014	15	19	61.6	47.6
1/31/2015	14	28	62.4	46.4
2/28/2015	15	49	76	47.8
3/31/2015	17	9	42	49
4/30/2015	17	10	37	48.5
5/31/2015	17	17	58.7	48.2
6/30/2015	17	30	58	47.3
7/31/2015	18	25	63.2	48
8/31/2015	12	5	42	47.3
9/30/2015	11	14	42.2	46.3
10/31/2015	11	5	39.3	44.4
11/30/2015	10	6	38	44.4
12/31/2015	10	4	44	44.8
1/31/2016	9	7	44	44
2/29/2016	8.3	14	70	44
3/31/2016	7.2	14	62	43
4/30/2016	7	17	64	41
5/31/2016	6.5	8.5	54	39
6/30/2016	6.4	11	41	38
7/31/2016	6.6	35	77	38
8/31/2016	17	9	42	49
9/30/2016	17	10	37	48.5
10/31/2016	17	17	58.7	48.2
11/30/2016	17	30	58	47.3
12/31/2016	6.9	16	38	68

Stonington Sanitary District - ME0101851 FACT SHEET ATTACHMENT B
Discharge Monitoring Report Data: January 2012 through December 2016

Other Parameters				
Monitoring Period End Date	**Flow 12 Month Rolling Average gpd**	**Settleable Solids Daily Maximum ml/l**	**pH Daily Minimum SU**	**pH Daily Maximum SU**
1/31/2012	23926	0.1	6.8	7.3
2/29/2012	23983	0.1	6.6	7.3
3/31/2012	23733	0.1	6.6	7.6
4/30/2012	22231	0.2	7.1	7.7
5/31/2012	22956	0.1	6.7	7.4
6/30/2012	24111	0.1	6.6	7.2
7/31/2012	24848	0.1	6.7	7.4
8/31/2012	25083	0.2	6.6	7
9/30/2012	24655	0.3	6.4	7.2
10/31/2012	24625	0.2	6.7	7.5
11/30/2012	23708	0.1	6.7	7.6
12/31/2012	23949	0.2	6.8	7.6
1/31/2013	23619	0.2	6.9	7.4
2/28/2013	24013	0.2	6.8	7.5
3/31/2013	24559	0.2	6.6	7.6
4/30/2013	24695	0.2	6.7	7.3
5/31/2013	24480	0.2	6.3	7.7
6/30/2013	24976	0.1	6.2	6.9
7/31/2013	27559	0.6	6.4	7.2
8/31/2013	29480	0.5	6.4	6.8
9/30/2013	31720	0.2	6.1	7
10/31/2013	32144	0.1	6.3	7.3
11/30/2013	32964	0.2	6.8	7.1
12/31/2013	33039	0.1	6.4	7.5
1/31/2014	34172	0.1	6.1	7.3
2/28/2014	34325	0.2	6	7.2
3/31/2014	34868	0.2	6.1	7.3
4/30/2014	35718	0.1	6.3	7.2
5/31/2014	35778	0.1	6.1	7.2
6/30/2014	36145	0.1	6	6.8

Stonington Sanitary District - ME0101851 FACT SHEET ATTACHMENT B
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Other Parameters				
Monitoring Period End Date	**Flow 12 Month Rolling Average gpd**	**Settleable Solids Daily Maximum ml/l**	**pH Daily Minimum SU**	**pH Daily Maximum SU**
7/31/2014	36082	0.1	6.2	6.8
8/31/2014	37002	0.1	6.4	7
9/30/2014	37453	0.03	6.3	7
10/31/2014	39202	0.1	6.3	7.2
11/30/2014	40817	0.2	6.5	7.1
12/31/2014	44645	0.2	6.5	7.2
1/31/2015	44321	0.1	6.5	7.3
2/28/2015	44207	0.1	6.5	7.2
3/31/2015	44678	0.2	6.1	7.2
4/30/2015	45493	0.2	6.3	7.3
5/31/2015	45574	0.2	6.4	7.4
6/30/2015	46858	0.1	6	7
7/31/2015	46026	0.1	6.4	7.4
8/31/2015	43001	0.1	6.3	7
9/30/2015	40144	0.2	6.1	7
10/31/2015	37657	0.1	6.4	7.4
11/30/2015	35584	0.1	6.2	7.3
12/31/2015	31466	0.1	6.2	7.3
1/31/2016	30547	0.1	6.5	7.5
2/29/2016	30800	0.1	6.4	7.5
3/31/2016	29136	0.1	6.5	7.5
4/30/2016	27202	0.1	6.5	7.4
5/31/2016	25476	0.1	6.5	7.3
6/30/2016	22224	0.1	6.3	7.3
7/31/2016	20442	0.1	6.4	7
8/31/2016	20306	0.1	6.5	7
9/30/2016	19882	0.1	6.2	6.9
10/31/2016	19931	0.1	6.5	7.6
11/30/2016	20955	0.1	6.6	7.5
12/31/2016	21701	0.1	6.3	7.3

Stonington Sanitary District - ME0101851 FACT SHEET ATTACHMENT B
Discharge Monitoring Report Data: January 2012 through December 2016

Seasonal Parameters			
Monitoring Period End Date	**Total Chlorine Residual Daily Maximum mg/l**	**Fecal Coliform Monthly Average #/100 ml**	**Fecal Coliform Daily Maximum #/100 ml**
5/31/2012	0.5	5.3	26
6/30/2012	1	2.6	2.9
7/31/2012	0.3	2.7	3.3
8/31/2012	0	3.3	3.3
9/30/2012	0.9	3.3	3.3
5/31/2013	1	3.3	3.3
6/30/2013	0.6	3.3	3.3
7/31/2013	0.8	3.6	4
8/31/2013	0	4	4
9/30/2013	1	4	4
5/31/2014	0.7	3.6	4
6/30/2014	0.8	4	4
7/31/2014	1	4	3.8
8/31/2014	0.1	4	4
9/30/2014	0.1	4	4
5/31/2015	0.1	4	4
6/30/2015	1	4	4
7/31/2015	0.02	4	4
8/31/2015	0.1	13	45
9/30/2015	0.1	15	28
5/31/2016	0	4	4
6/30/2016	0.05	6.1	32
7/31/2016	0.8	3.8	4
8/31/2016	0.05	6.8	40
9/30/2016	0.05	4	4
5/31/2012	0.5	5.3	26

Stonington Sanitary District - ME0101851 FACT SHEET ATTACHMENT B
Discharge Monitoring Report Data: January 2012 through December 2016

Seasonal Parameters			
Monitoring Period End Date	**Total Chlorine Residual Daily Maximum mg/l**	**Fecal Coliform Monthly Average #/100 ml**	**Fecal Coliform Daily Maximum #/100 ml**
6/30/2012	1	2.6	2.9
7/31/2012	0.3	2.7	3.3
8/31/2012	0	3.3	3.3
9/30/2012	0.9	3.3	3.3
5/31/2013	1	3.3	3.3
6/30/2013	0.6	3.3	3.3
7/31/2013	0.8	3.6	4
8/31/2013	0	4	4
9/30/2013	1	4	4
5/31/2014	0.7	3.6	4
6/30/2014	0.8	4	4
7/31/2014	1	4	3.8
8/31/2014	0.1	4	4
9/30/2014	0.1	4	4
5/31/2015	0.1	4	4
6/30/2015	1	4	4
7/31/2015	0.02	4	4
8/31/2015	0.1	13	45
9/30/2015	0.1	15	28
5/31/2016	0	4	4
6/30/2016	0.05	6.1	32
7/31/2016	0.8	3.8	4
8/31/2016	0.05	6.8	40
9/30/2016	0.05	4	4

Stonington Sanitary District Fact Sheet Attachment C

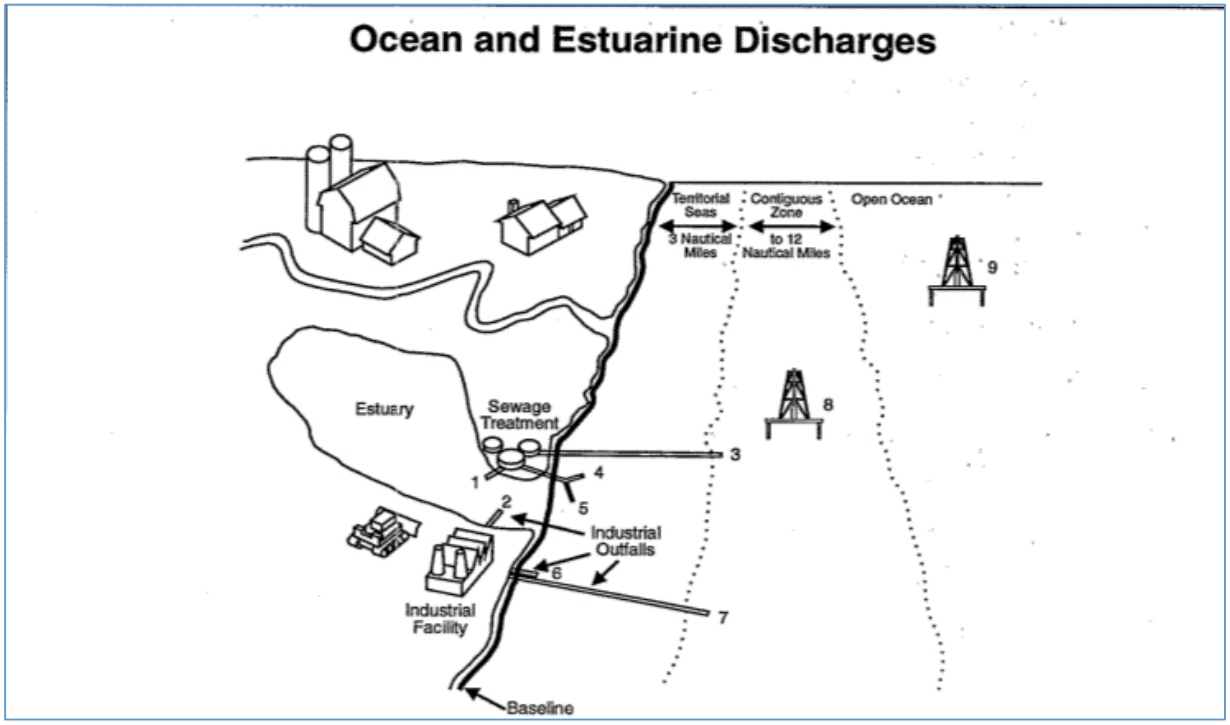
Implementation of Section 403(C) of the Federal Water Pollution Control Act

40 CFR §§125.120-124

Introduction

Discharge of pollutants from a point source into surface waters designated *as territorial seas, the contiguous zone, and the oceans* (henceforth "marine waters") under Section 403(C) of the Federal Water Pollution Control Act require an additional level of review to insure that the discharge will not cause *unreasonable degradation of the marine environment* as defined at 40 CFR §125.121(e).

The determination of which NPDES permits fall within marine waters, Section 403(C) is a complex process. The threshold determination for applicability of the section 403 guidelines is whether a proposed discharge will occur seaward of the inner boundary of the territorial seas under EPA's consolidated permit regulations (45 FR 33290, May 19, 1980). Without further discussion of the process, EPA has determined that the Stonington Sanitary District (SSD) falls within Section 403(c) jurisdictional waters.

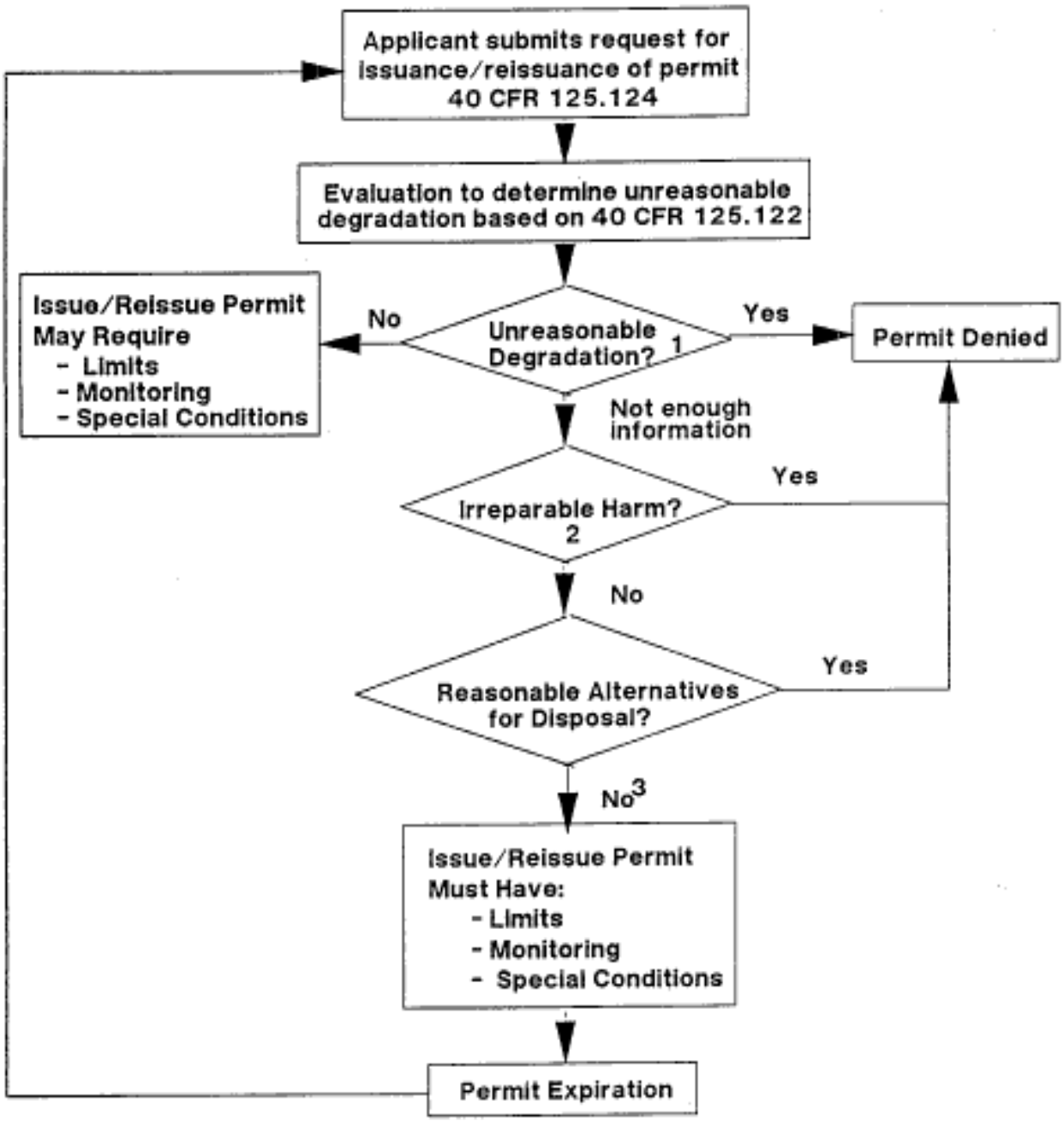


EPA published guidelines to be applied in issuing and revising National Pollutant Discharge Elimination System Permits for discharges into marine waters in the Federal Register Vol. 45, No; 194 / Friday, October 3, 1980, pages 65942 - 65954. The published guidelines include ten specific areas of concern. Each of these ten areas will be addressed in the following pages (see underlined headers). Many of the ten areas are addressed in the CWA 301(h) application requirements found in 40 CFR Part 125, subpart G, as some of the elements are essentially the same. On May 5, 2014, SSD submitted to EPA a CWA 301(h) application.

Contained within this NPDES Fact Sheet Attachment is EPA's determination that the SSD will not cause unreasonable degradation of the marine environment. See Figure 1 for the decision process.

Stonington Sanitary District Fact Sheet Attachment C

Figure 1: 403(c) Decision Process



Stonington Sanitary District Fact Sheet Attachment C

The broad requirements of the CWA Section 403(c) review are defined in 40 CFR §125.123(d). See the following.

40 CFR §125.123(d)

All permits which authorize the discharge of pollutants pursuant to paragraph (c) of this section shall:
(1) Require that a discharge of pollutants will: (i) Following dilution as measured at the boundary of the mixing zone not exceed the limiting permissible concentration for the liquid and suspended particulate phases of the waste material as described in §227.27(a) (2) and (3), §227.27(b), and §227.27(c) of the Ocean Dumping Criteria; and (ii) not exceed the limiting permissible concentration for the solid phase of the waste material or cause an accumulation of toxic materials in the human food chain as described in §227.27 (b) and (d) of the Ocean Dumping Criteria;
(2) Specify a monitoring program, which is sufficient to assess the impact of the discharge on water, sediment, and biological quality including, where appropriate, analysis of the bioaccumulative and/or persistent impact on aquatic life of the discharge;
(3) Contain any other conditions, such as performance of liquid or suspended particulate phase bioaccumulation tests, seasonal restrictions on discharge, process modifications, dispersion of pollutants, or schedule of compliance for existing discharges, which are determined to be necessary because of local environmental conditions, and
(4) Contain the following clause: In addition to any other grounds specified herein, this permit shall be modified or revoked at any time if, on the basis of any new data, the director determines that continued discharges may cause unreasonable degradation of the marine environment.

All the previous conditions specified in 40 CFR §125.123(d), are addressed in the body of the Fact Sheet itself.

Facility Description

The facility receives flows from 285 on-site septic tanks located on individually and publicly owned lots and backwash waters from a local public drinking water treatment facility. The collection system network conveys the septic tank effluent from each lot to a common disinfection tank with chlorination and dechlorination capabilities.

Discharge Location and Dilution

The maximum design flow of the facility is 175,000 gallons per day. The 5 year annual average flow (as 2014) is 26,000 per day. The outfall[1] consists of a pipe measuring 8 inches in diameter that extends approximately 600 feet out into the Deer Isle Thorofare in East Penobscot Bay. The Deer Island Thorofare is a narrow passage leading along the south side of Deer Isle, between it and the numerous islands southward. The passage joins Jericho Bay and East Penobscot Bay. See Fact Sheet Attachment A for location map.

[1] CWA 301(h) application, May 5, 2014 from Stonington Sanitary District, Page 4

Stonington Sanitary District Fact Sheet Attachment C

The outfall discharges at minus 20.0 feet mean low tide elevation. The Maine DEP determined the following dilutions using a CORMIX model. The acute and chronic dilution factors are >1,000:1 and the harmonic mean dilution factor is >3,000:1. The normal tidal range is more than 9 feet with a flow current on 0.4 nautical MPH (kts) and an ebb current of -0.7 kts[2].

Effluent Characteristics

See the permit Fact Sheet for a discussion of the pollutants found in the effluent and Attachment ___ for discharge monitoring data.

Review Criteria

1) Quantities, composition, and potential bioaccumulation or persistence of the pollutants to be discharged.

The Maine Wastewater Licensing program implements the Surface Waters Toxics Control Program found at, Code of Maine Rules (CMR) Chapter 530. Within the program, each discharger is assigned a level which determines the frequency at which they must conduct whole effluent toxicity testing (WET) and priority pollutant testing (defined at 40 CFR Part 423, Appendix A). The Stonington discharge falls within Level IV, those dischargers having a chronic dilution factor of at least 500 to 1 and a permitted flow of less than 1 million gallons per day. Both effluent screening and surveillance testing are required once per year. These routine testing requirements, however, for Level IV are waived, except that the DEP shall require an individual discharger to conduct testing under the following conditions. The discharger's permit application or information available to the Department indicate that toxic compounds may be present in toxic amounts; or previous testing conducted by the discharger or similar dischargers indicates that toxic compounds may be present in toxic amounts.

The decision to exempt Level IV dischargers from both WET and priority pollutant scanning was made after extensive review of hundreds WET tests and priority pollutant scans throughout Maine. The results demonstrated conclusively that those dischargers having a chronic dilution factor of at least 500 to 1 and a permitted flow of less than 1 million gallons per day consistently had to *no reasonable potential to cause or contribute to an exceedance of State Water Quality Criteria* (See 40 CFR §122.44(d)). The discharge of toxic pollutants was in concentrations below the threshold for establishing permit limits.

The SSD is required to implement a public education program (See 40 CFR §125.66(d)(1)) designed to minimize the entrance of non-industrial toxic pollutants and pesticides into the collection system and wastewater treatment facility by homeowners. There are no industrial contributors to the collection system. EPA has no expectation that the Stonington domestic wastewater will contain bioaccumulative or persistent pollutants.

The combination of extreme dilution, low effluent flows, and extensive experience with domestic wastewater effluent is sufficient to satisfy EPA that permittee will not discharge toxic pollutants in toxic amounts and that the marine water quality standards for discharged pollutants will be met.

[2] Tide and current stations https://tidesnear.me/current_stations/11

2) Potential transport of the pollutants by biological, physical, or chemical processes.

The buoyant effluent is subject to tidal shear and immediate dilution and dispersion. A survey conducted by SCUBA divers from DEP found[3]*; the area within and outside the ZID* [zone of initial dilution – mixing zone] *is composed of fine sediments missed with shell fragments, with a thin cover of brown algae. Sand shrimp, worm tubes, crab and lobster holes were numerous in the area of the outfall. Water quality, sediment and photographic information indicate that these discharges* [Stonington and some other small Maine 301(h) facilities] *are not causing any significant impact to the receiving water. These discharges are small compared to their receiving water and in all cases there is considerable mixing. It has been observed that the warm fresh (low density) water that is discharged moves directly to the surface in all cases and dispenses quickly by wind, current and dilution. Therefore, one would not expect to observe any benthic effects in or around the ZID. Surface dispersion occurs over a very large area which negates the expectation of any measurable effects.*

There is nothing to attract free swimming aquatic life to the ZID or cause them to remain within the vicinity of the ZID. Sessile life forms are expected to remain within the ZID for very brief periods because of dilution, as previously explained. The buoyant effluent undergoes extreme dilution before any pollutants have the opportunity to settle, bioaccumulate, or coagulate in any measurable amounts.

3) Composition and vulnerability of potentially exposed biological communities, including

- Unique species or communities.

The outfall discharges to Essential Fish Habitat (PL 104-267) for three species, Atlantic cod (Gadus morhua), Atlantic halibut (Hippoglossus hippoglossus), and Atlantic sea scallop (Placopecten magellanicus). As explained previously, *there are no expectation of any measurable effects*to these species.

- Endangered or threatened species

The following information concerning endangered or threatened species (See Section 7(a)(2) of the Endangered Species Act of 1973 (ESA)) is found in the body of the Fact Sheet.

> Atlantic salmon which are listed as endangered, may transit this general area as smolts or adults, but the habitat within the Deer Island Thorofare is not likely to attract Atlantic salmon, or delay their migration. The Stonington discharge is not located within designated shortnose sturgeon habitat, nor is it an area where endangered shortnose sturgeon are expected to routinely inhabit.
>
> While the potential exists for federally-listed marine species to be present, the likelihood of whale species to inhabit or even transit this shallow and narrow passage appears remote. Similarly, it appears unlikely that other federally-listed species would routinely inhabit this area, although their presence is possible.

There is no reason for any ESA listed species to spend sufficient time within the ZID to receive demonstrable harm from constituents in the effluent. Outside the ZID, dilution precludes toxic concentrations of pollutants.

[3] 301(h) facilities in Maine, Report of 1995 Monitoring Activities. Report submitted to U.S. EPA by Maine DEP, July 1996

- Species critical to the structure or function of the ecosystem.

The DEP SCUBA survey of the area surrounding the outfall and a control site, found no apparent difference in in habitat or species present. The discharge is not having any detectable effects to any species, critical or otherwise.

4) Importance of the receiving water area to the surrounding biological community, e.g.

- Spawning sites.
- Nursery/forage areas,
- Migratory pathways,
- Areas necessary for critical life stages/functions of an organism.

The outfall is not located in an estuary, within eel grass beds, migratory pathways or within know spawning areas. The area of the outfall has no critical habitat designations.

5) The existence of special aquatic sites, including (but not limited to)

- Marine sanctuaries/refuges,
- Parks,
- Monuments,
- National seashores,
- Wilderness areas,
- Coral reefs/seagrass beds.

The outfall is not located in or near any special aquatic sites.

6) Potential direct or indirect impacts on human health.

The permit requires year-round disinfection to control pathogens that might cause human illness due to contact recreation or ingestion of fish or shellfish. The draft permit includes fecal coliform and enterococci bacteria limits and monitoring requirements to protect human health. DEP imposes a shellfish closure area in proximity to all POTW outfall and the outfall has been extended beyond the principal recreation areas.

7) Existing or potential recreational and commercial fishing.

Stonington is home to the most productive lobster fishing port along the Maine coast. Stonington also has a lobster hatchery. Of more than 25 popular marine water fishing spots located around Deer Island[4], none were identified in the Deer Island Thorofare. The congested shallow Thorofare is not conducive to trawling or seining of fish.

[4] http://www.hookandbullet.com/c/fishing-deer-isle-me/

8) Any applicable requirements of an approved Coastal Zone Management Plan (CZMP).

The Maine DEP must certify under CWA Section 401, that the final NPDES permit will be protective of Maine's water quality standards. The Maine CWA Section 401 certification of the NPDES permit serves also as concurrence under the Maine Coastal Zone Protect Act.

> Consideration of core law permits will constitute the State's consistency review, and approval of all core law permits with attached conditions shall constitute the State's consistency concurrence [including] National Pollution Discharge Elimination System (NPDES) permit under Section 402 of the Clean Water Act, 33 U.S.C. §§1342, et seq.[5]

There are no provisions specific to coastal zone management anticipated in the DEP, 401 certification of this permit.

9) Such other factors relating to the effects of the discharge as may be appropriate.

None.

10) Marine water quality criteria.

Stonington discharges to Maine Class SB waters.

> Class SB waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life. The habitat must be characterized as unimpaired. [2003, c. 227, §7 (AMD).][6]

[5] Maine Guide to Federal Consistency Review, Maine Coastal Program, 4th Edition – Update 4 January 2013

[6] Maine Revised Statutes - Title 38: Chapter 3: Subchapter 1: Article 4-A: Water Classification Program

Stonington Sanitary District
Fact Sheet Attachment D - **Statement for Reduced/Waived Toxics Testing**

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES#_____Facility Name_____

Since the effective date of your permit, have there been;		NO	YES Describe in comments section
1	Increases in the number, types, and flows of industrial, commercial, or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic?	☐	☐
2	Changes in the condition or operations of the facility that may increase the toxicity of the discharge?	☐	☐
3	Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge?	☐	☐
4	Increases in the type or volume of hauled wastes accepted by the facility?	☐	☐

COMMENTS:

Name (printed): _____

Signature:_____Date: _____

This document must be signed by the permittee or their legal representative.

This form may be used to meet the requirements of Chapter 530.2(D)(4). This Chapter requires all dischargers having waived or reduced toxic testing to file a statement with the Department describing changes to the waste being contributed to their system as outlined above. As an alternative, the discharger may submit a signed letter containing the same information.

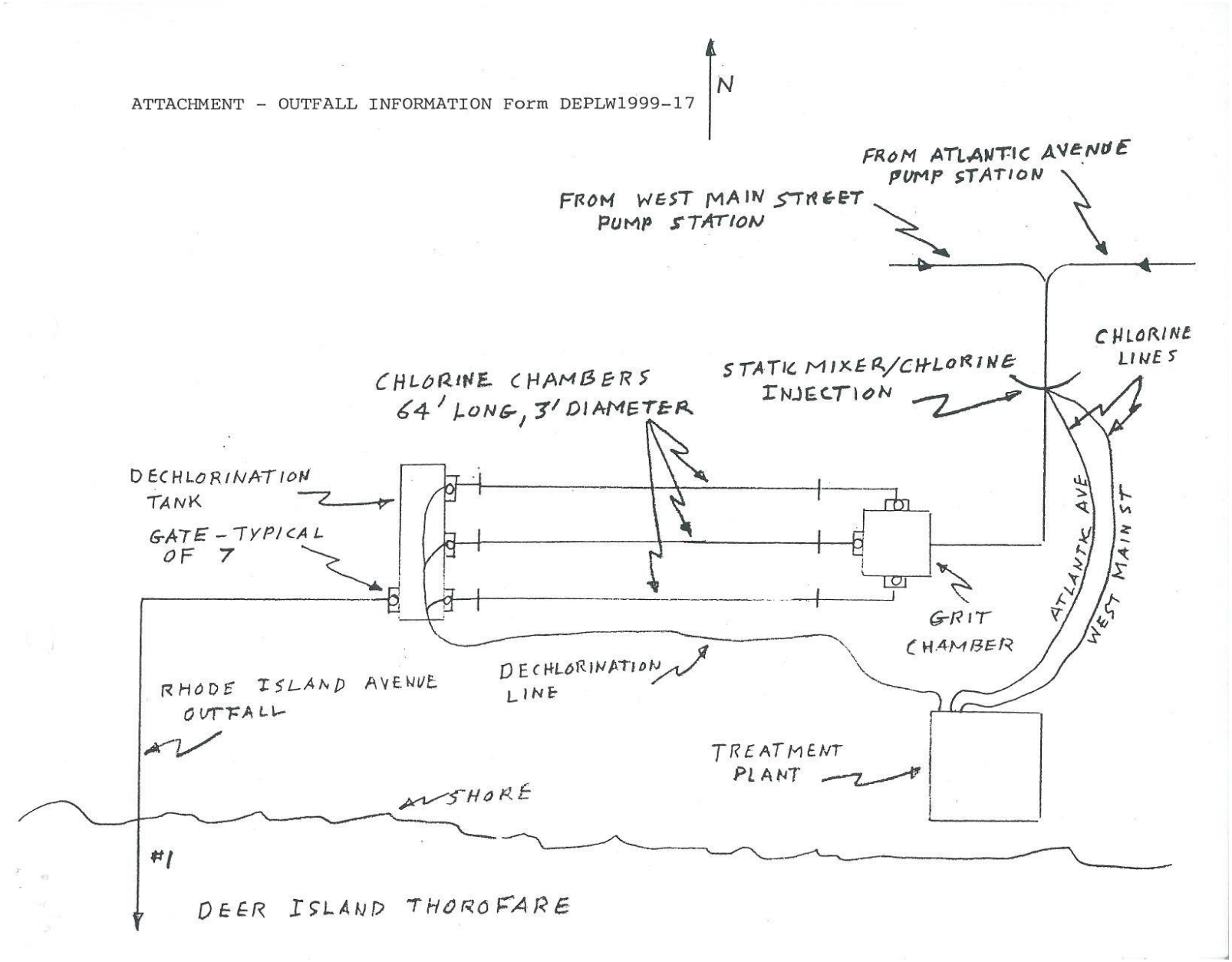
Scheduled Toxicity Testing for the next calendar year

Test Conducted	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
WET Testing	☐	☐	☐	☐
Priority Pollutant Testing	☐	☐	☐	☐
Analytical Chemistry	☐	☐	☐	☐
Other toxic parameters[1]	☐	☐	☐	☐

Please place an "X" in each of the boxes that apply to when you will be conducting any one of the three test types during the next calendar year.

[1] This only applies to parameters where testing is required at a rate less frequently than quarterly.

Fact Sheet Attachment E Stonington Sanitary District Treatment Schematic



STONINGTON SANITARY DISTRICT STONINGTON, MAINE PUBLICLY OWNED TREATMENT WORKS, APPLICATION FOR SECTION 301(h) VARIANCE FROM THE SECONDARY TREATMENT REQUIREMENTS OF THE CLEAN WATER ACT	)))))))	TENTATIVE DECISION OF THE REGIONAL ADMINISTRATOR PURSUANT TO 40 CFR PART 125, SUBPART G

The Stonington Sanitary District (SSD/District/permittee) operates a publicly owned treatment works located in the Town of Stonington, Maine. The Town has submitted a waiver application pursuant to Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987 (the Act). The U.S. Environmental Protection Agency (EPA hereinafter) has reviewed the merits of this application for the waiver request. Based on this review, it is my tentative decision that SSD 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.

SSD's application is seeking approval for the discharge of up to a 12-month rolling average flow of 175,000 gallons per day of primary treated wastewater generated by residential homes & commercial entities within the District's boundaries. The SSD 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 August 25, 1988, and subsequently renewed on March 14, 2003. It is my tentative decision that the SSD be granted a renewal of the variance in accordance with the terms, conditions, and limitations of the attached evaluation. This determination is subject to concurrence by the State of Maine as required by Section 301(h) of the Act. Region I has prepared a draft NPDES permit in accordance with this decision.

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

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

Date: _____

_____

Deborah Szaro,
Acting Regional Administrator
Environmental Protection Agency
Region I

TENTATIVE DECISION DOCUMENT

ANALYSIS OF THE APPLICATION FOR A SECTION 301(h)

SECONDARY TREATMENT VARIANCE

FOR

THE STONINGTON SANITARY DISTRICT

WASTEWATER TREATMENT PLANT

ENVIRONMENTAL PROTECTION AGENCY
REGION I - NEW ENGLAND

June 2017

Contents

Figures:

I. LIST OF ABBREVIATIONS

BIP .....Balanced Indigenous Population
BOD .....Biological 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
MGD .....million gallons per day
WQS.....Surface Water Quality Standards
NPDES.....National Pollution Discharge Elimination System
SSD……. Stonington Sanitary District
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

II. SUMMARY

The applicant, the Stonington Sanitary District (SSD), is seeking a variance from secondary treatment requirements for the discharge of a 12-month rolling average flow of up to 175,000 gallons per day (gpd) from its wastewater treatment plant. The treatment plant is located in Stonington, Maine and discharges its effluent to the Deer Island Thorofare, a Class SB waterway as classified by 38 Maine Revised Statutes Annotated (M.R.S.A.) §469.

EPA followed the guidance provided in EPA's Amended Section 301(h) Technical Support Document (1994) for evaluating the improved discharge for a small applicant (average dry weather flows below 5.0 MGD). The Region relied on information in a document entitled "301(h) Facilities in Maine, Report of 1995 Monitoring Activities," prepared by the State of Maine's Department of Environmental Protection ("MEDEP" or "Department") and submitted to EPA in July 1996, as well as monthly compliance data generated by SSD in accordance with the terms and conditions of NPDES Permit/Maine Discharge License for the period from March 14, 2003 through the present.

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 12-month rolling 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.

III. INTRODUCTION

SSD 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 regard to SSD's 301(h) waiver request. The conclusions and recommendations in this document are based on the application of the requirements set forth in 40 CFR Part 125, Subpart G (revised on August 9, 1994) to SSD's discharge.

The applicant's most recent combined EPA Permit and Maine State License expired on March 14, 2003. SSD submitted an updated application for the License renewal on November 11, 2007 and upon request submitted an updated application for a Section 301(h) variance on May 15, 2014. The expired permit remains in effect under the provisions of 40 CFR 122.6.

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

IV. DESCRIPTION OF TREATMENT FACILITY

Sanitary wastewaters received at the treatment facility are generated by residential and commercial entities within the area served by the SSD. The facility does not receive any flows from industrial sources but does receive backwash waters from a local public drinking water facility. The collection system is a separated system.

The facility currently provides a primary level of treatment for flows from 285 on-site septic tanks located on individually and publicly owned lots. The collection system network conveys the septic tank effluent from each lot to a common disinfection tank with seasonal chlorination and dechlorination capabilities prior to discharge to Deer Island Thorofare. The outfall consists of a ductile iron/PVC discharge pipe measuring 8 inches in diameter that extends out into the receiving waters approximately 600 feet. The outfall discharges 20.0 feet below mean low tide elevation according to a plan prepared by Wright-Pierce Engineers, entitled, Stonington Sanitary District, Stonington, Maine, Wastewater Facilities, Wastewater Collection, Outfall Sewer & Treatment Facilities, Ocean Outfall, dated July 11, 1991, and revised May 22, 1995.

The permittee is required to maintain the septic tanks according to a regular maintenance schedule. The tanks are periodically inspected to determine malfunctions and the amount of accumulated solids retained in the tanks. Through inspections, an appropriate pump-out frequency is established for each septic tank. The permittee is required to keep on-site a record of septic tank inspections and maintenance documenting the amount of solids removed from each tank.

Uranium is a naturally occurring element in groundwater. The Stonington Sanitary District receives 1,000 gallons annually (150 gallons & 350 gallons 2x/year) of uranium brine backwash water from the Stonington Water Co, the local public drinking water supplier. The concentration of uranium at the point of discharge from SSD will be less than the naturally occurring sea water concentration of 3 µg/L. See the following calculation.

500 gallons of filter backwash (2 x year)
Concentration of Ur in backwash brine, 15 ug/l
Mixed with >20,000 gpd actual plant flow.

The internal dilution = $\frac{20{,}000 \text{ gallons}}{500 \text{ gallons}} = 40{:}1$

$\frac{15 \text{ ug/L}}{40} = 0.375 \text{ ug/L}$

There are no surface water marine criteria for uranium and the calculated effluent concentration is >0.4 ug/l at the point of discharge, well below the 3 ug/l naturally occurring uranium concentration in seawater. The low discharge concentration and lack of criteria mean that there is no reasonable potential for the discharged of uranium from SSD to cause or contribute to an exceedance of a state water quality standard.

The March 14, 2003 permit established three tiers for effluent flow and corresponding BOD_5 and TSS limits. The effluent design flow is equivalent to the total capacity (volume) of the in ground septic systems. The first tier reflected the as-built capacity at the time of permitting. The flow level of 175,000 GPD is the potential wastewater generation rate estimated for the entire sewer service area under fully developed future design year conditions. It is also consistent with the in-place capacity of the treatment system and its chlorine contact tank. The draft permit reduces the number of tiers from 3 to 2. This recognizes that new connections to the SSD system have been few and the tankage capacity has been relatively stable over the past decade. The May 5, 2014, response to EPA's 301(h)-Modified NPDES Permit Reissuance Questionnaire for Small Dischargers in Maine by SSD stated that the projected effluent volume was the same as in the previous permit cycle.

The draft permit tiers (2) reflect the current capacity and contractually obligated future capacity. Tier 1 has a 6 percent effluent flow and BOD_5/TSS increase to reflect the best estimate of current capacity.

V. DESCRIPTION OF RECEIVING WATER

The Deer Island Thorofare, East Penobscot Bay is marine water subject to tidal action with a difference in tides (mean high to mean low) of up to 15 feet with very strong currents. Maine law, 38 M.R.S.A., §469 classifies the receiving waters at the point of discharge as Class SB waters. Maine law, 38 M.R.S.A., Section 465-B(2) contains the classification standards for Class SB waters. See Section V(B) of this document for a description of the designated uses as well as numeric and narrative water quality standards for Class SB waters.

SSD's wastewater treatment facility discharges to a shellfish harvesting area that the Maine Department of Marine Resources (DMR) has designated as shellfish Area 38, Deer Island, Stonington and Merchants Row. See page 7 of the Fact Sheet of the permit for a map delineating Area 38.

VI. PHYSICAL CHARACTERISTICS OF THE DISCHARGE

A. Dilution Factors

Pursuant to 40 CFR 125.62(a), the outfall and diffuser must be located and designed to provide adequate initial dilution, dispersion, and transport of 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.

The effluent from the SSD wastewater treatment facility is conveyed to the Deer Island Thorofare. The outfall pipe extends out into the receiving water approximately 600 feet with approximately twenty (20) feet of water over the crown of the pipe at mean low water. MEDEP Rule 06-096 CMR, Chapter 530, *Surface Water Toxics Control Program*, §4(a)(2) states:

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

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

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

(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 175,000 gpd were as follows.

Acute: ≥1,000:1 Chronic: ≥1,000:1 Harmonic mean: ≥3,000:1

Pursuant to Department Rule Chapter 530, "*Surface Water Toxics Control Program*", §4(2)(c), the harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by a factor of three (3).

VII. APPLICATION OF STATUTORY AND REGULATORY CRITERIA

A. Primary or Equivalent Treatment Requirements

[Section 301(h) of the Clean Water Act, 40 CFR 125.57, 40 CFR 125.58(r) and 40 CFR 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 CFR 125.57, 125.58(r) and 122.60). 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 Attachment B for a summary of Discharge Monitoring Report data for the period; January 2012 through December 2016. There were no reported exceedances of limits for BOD_5, TSS, fecal coliform bacteria, pH, or total residual chlorine.

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

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

The State of Maine has adopted water quality standards including water use classifications. The Deer Island Thorofare is classified as Class SB pursuant to Maine law, 38 M.R.S.A., §469. Maine law 39 M.R.S.A §465-B(2) contains the following standards for Class SB waters:

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

Specific Maine water quality criteria related to DO, TSS and pH are discussed below:

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

Maine law, 38 MRSA, §465-B(2)(A) specifies that Class SB waters shall have a dissolved oxygen content of at least 85% of saturation.

A recent study of 40 marine outfalls published in the Marine Pollution Bulletin 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.[1] The study demonstrated where significant currents and wave action were present, there was almost no degradation to the marine environment from small municipal dischargers. 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 insures 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 Stonington.

(2) Suspended Solids [40 CFR Section 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:

MSRA §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,

MSRA §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.*

As discussed in Section V.D., a SCUBA diving survey of the benthic environment revealed that the discharge was not having a significant impact in the vicinity of the outfall. The

[1] Response of benthos to ocean outfall discharges: does a general pattern exist?, A. Puente,R.J. Diaz, Marine Pollution Bulletin, Elsevier, 15 December 2015

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 CFR Section 125.61(a)(3)]

Maine law 38 M.R.S.A. §464(4)(A)(5) specifies that no discharge shall cause the pH of marine water to fall outside the range of 7.0 – 8.5 standard units. The current NPDES permit established a technology based pH range limit of 6.0 –9.0 standard units pursuant to Department rule, Chapter 525(3)(III)(c), along with a monitoring frequency of 1/Day.

A. 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 CFR Section 125.62]

B. Physical Characteristics of Discharge – Attainment of Water Quality Standards [40 CFR 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 IV.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 39 M.R.S.A §465-B(2)) are:

Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The number 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.

Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community[2].

[2] Maine Revised Statutes, Title 38, Chapter 3, §465-B.2.C.

There shall be no new discharge to Class SB waters which would cause closure of open shellfish areas by the Department of Marine Resources.

Maine law 38 M.R.S.A., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program,* require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected. Total residual chlorine is the only known toxic constituent in the effluent. It is regulated to insure 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 CFR Part 122.44(d),

(1) Fecal Coliform

Maine law 38 M.R.S.A. §465-B(2)(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 colonies/100 ml and 50 colonies/100 ml respectively that are consistent with limitations in the National Shellfish Sanitation Program. 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 colonies/100 ml and 31 colonies/100 ml respectively

This permitting action is establishing May 15th – September 30th as the season in which the limitations are in effect, to be consistent with other like permits issued by the Department and consistent with Maine law found at 38 M.R.S.A., Section 465-B(2)(B). The monitoring frequency is 1/week.

As discussed in detail in Section V.C.(6), the waters surrounding Stonington Island are closed to shellfishing by order of the Maine Department of Marine Resources (DMR). SSD's reported compliance with its bacteria limits, 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.

(2) Enterococci

Maine water quality standards use enterococci as indicator organisms for protection of estuarine and marine recreational waters (38 MRSA Ch. 3 §465-B). Because contact recreation occurs largely in the summer months, the enterococci criteria are applied seasonally.

Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters.[3] The current permit does not have enterococci limits. The draft 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 proposed in the draft permit are a monthly geometric mean of 8 cfu/100 ml and a maximum daily limit of 54 cfu/100 ml. The monitoring frequency shall be weekly.

(3) Total Residual Chlorine

Maine law 38 M.R.S.A. § 420 prohibits dischargers from discharging toxic pollutants in toxic amounts. MEDEP rule 06-096 CMR, Chapter 584 establishes numeric ambient water quality criteria for pollutants known to be toxic to aquatic life or harmful to humans. There are no pollutants discharged from the SSD facility in toxic amounts.

The March 14, 2003 NPDES permit established a technology-based daily maximum limitation of 1.0 mg/L for total residual chlorine (TRC).

Limits on TRC are specified to ensure attainment of the in-stream 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.

To meet the water quality based limits calculated above, the permittee must dechlorinate the effluent prior to discharge.

Municipal wastewater treatment facilities treating only to primary, require stronger disinfection measures because of shading of bacteria in the higher solids content found in such effluent. For this reason, MEDEP does not hold SSD to the limits of 0.3 mg/L and 0.1 mg/L. The Department's BPT limit of 1.0 mg/L is applicable.

End-of-pipe water quality based concentration thresholds may be calculated as follows, however, as stated above, since the technology-based limit is more stringent the draft permit contains a TRC limit of 1.0 mg/L.

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution
Chlorine	13 ug/L	7.5 ug/L	1000:1	1000:1

Calculation of Acute Limit – 0.013 mg/L (1000) = 13 mg/L
Calculation of Chronic Limit – .0075 mg/L(1000) = 7.5 mg/l

[3] 38 MRSA Ch.3 §465-B(2)(B)

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

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

D. Biological Impact of Discharge. [40 CFR 125.62(c)]

The discharge must allow for the attainment or maintenance of water quality which assures protection and propagation of a balanced indigenous population (BIP) of fish, shellfish, and wildlife (40 CFR 125.62(c)(1)). A BIP must exist immediately beyond the boundary of the zone of initial dilution (ZID) and in all areas beyond the ZID that are actually or potentially affected by the applicant's discharge (40 CFR 125.62(c)(2)). Conditions within the zone of initial dilution must not contribute to extreme adverse biological impacts, including, but not limited to, the destruction of distinctive habitats of limited distribution, the presence of a disease epicenter, or the stimulation of phytoplankton blooms which have adverse effects beyond the zone if initial dilution. [40 CRF 125.62(c)(3)]

See the discussion in Section D of this document. The area at the point of discharge is indistinguishable from control areas supporting a BIP of fish, shellfish, and wildlife.

E. Impact of Discharge on Recreational Activities. (40 CFR 125.62(d)

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

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 MRSA Ch. 3 §465). Because contact recreation occurs largely in the summer months, the enterococci criteria are applied seasonally. Between May 15th and September 30th.

(5) Additional requirements for applications based on improved or altered discharges [40 CFR 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 CFR 125.62(f)]

The State of Maine 2012 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 a Category 4A water, "Estuarine and Marine Waters with Impaired Use, TMDL Completed.[4]"

(See page 137 of the 2012 Integrated Water Quality Monitoring and Assessment Report Appendices). The waters listed are closed for shellfishing by the Maine Department of Marine Resources (DMR), Area 38. The closure is due to "elevated fecals only".

There were reported exceedances of the fecal coliform 50/100 ml maximum daily limit on September 9, 2010 (100/100 ml), July 21, 2011(53.3/100ml) and July 28, 2011 (200/100 ml). The SSD has not reported any bacteria limit exceedances in 2012 through August of 2016. DMR issued an updated closure notice on August 3, 2014, based on ambient water quality sampling indicating elevated levels of bacteria. The most recent closure notice is quoted below:

[As amended August 3, 2014] DMR Chapter 95.05(LL) Pollution Area No 38.

Effective immediately, because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels taken from the shores, flats and waters of the following areas:

[Excerpted] *3. Stonington Harbor (Stonington): north of a line beginning at the southwest point of Moose Island, then running southeast to a red nun #24, then northeast to the northwestern ledge of the Dow Ledges, and then north to the mouth of the Ames Pond Stream.*

[4] Maine Statewide Bacteria TMDL: APPENDIX II Marine & Estuarine Waters Prepared by: FB Environmental Associates, Inc. August 2009 Report #: DEPLW-1004

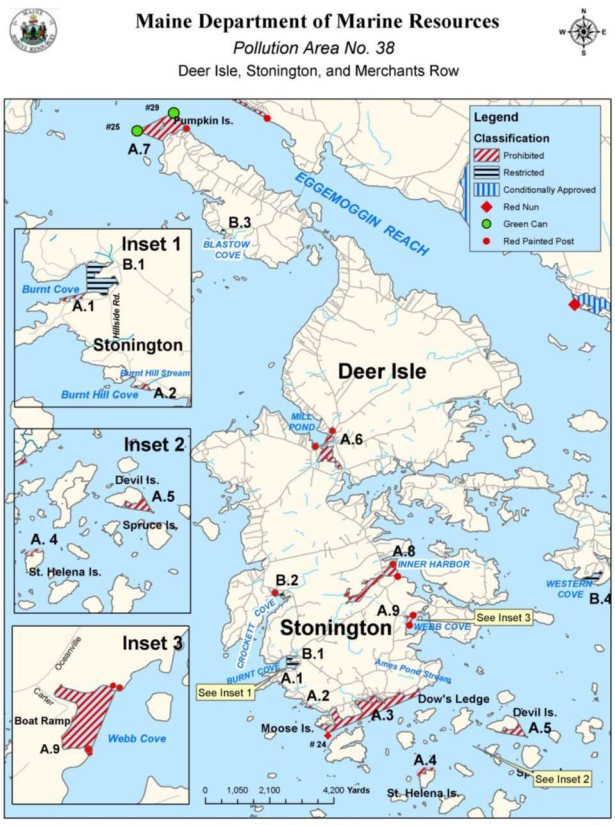


Figure 1 Shellfish Closure Area

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 V.C.(1.)(a), compliance with the monthly average and daily maximum limitations for fecal coliform bacteria will ensure the SSD facility will not cause or contribute to the closure of the shellfish harvesting area.

The Maine DEP 2014 Integrated Water Quality Monitoring and Assessment Report (IWQMA) also lists all estuarine and marine waters capable of supporting American lobster as Category 5-D, partially supporting fishing ("shellfish" consumption) due to elevated levels of PCBs and other persistent, bioaccumulating substances in lobster tomalley. (See IWQMA Appendices, Page 178)

EPA is not aware of any PCBs or persistent, bioaccumulating substances being discharged from the SSD wastewater treatment that cause or contribute to the waterbody's impairment.

D. Establishment of Monitoring Programs [40 CFR 125.63]

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

In the first 301(h) permit issued to SSD, EPA required SCUBA surveys of the benthic community in the vicinity of the discharge from the outfall and at comparison sites outside the zone of initial dilution (ZID) in accordance with 40 CFR§ 125.63 "Establishment of a monitoring program." Maine DEP conducted the required dives in 1995 on behalf of the SSD and for other Maine 301(h) dischargers.

According to the report prepared by the Department following the SCUBA surveys titled "301(h) Facilities in Maine, Report of 1995 Monitoring Activities," dated July 1996 and submitted to EPA, "Water quality, sediment, and photographic information indicates that SSD and these [301(h)-type] discharges are not causing any significant impact to the receiving waters." That document concluded that no further ambient monitoring be conducted, and recommended that effluent monitoring be continued. By letter dated February 17, 1995 from the EPA Regional Administrator, EPA agreed there would be little risk of adverse impacts to the receiving waters from these discharges provided that the permittee perform effluent monitoring as part of the regular permit conditions. In subsequent permit actions, MEDEP and EPA have agreed that further SCUBA inspections were too dangerous as a result of the swift currents generally found in 301(h) discharge receiving waters.

Pursuant to the findings of the July 1996 report described above, EPA does not believe that further ambient monitoring in the vicinity of the discharge is necessary.

The discharge has not changed appreciably since the 1995 survey was conducted and so its findings remain valid.

The NPDES permit contains monitoring conditions that will provide data on the quality of the effluent including flow, BOD, TSS, settleable solids, fecal coliform, enterococci bacteria, total residual chlorine, and pH.

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

40 CFR 125.64(a) states that no modified discharge may result in any additional pollution control requirements on any other point or nonpoint source, and 40 CFR Part 125.64(b) requires that the applicant obtain a determination from the State or interstate agency having authority to establish waste load allocations indicating whether the applicant's discharge will result in any additional treatment pollution control, or other requirement on any other point or nonpoint source. SSD anticipates receiving said determination from the MEDEP prior to issuance of the final NPDES permit.

F. Toxics Control Program [40 CFR 125.66]

(1) Chemical Analysis [40 CFR 125.66(a)(1-2)]

SSD 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.

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

Given the nature of the source of the discharge (residential entities) SSD has determined to the best of their knowledge, there are no sources of toxic pollutants being conveyed to the treatment plant. Therefore, an industrial pretreatment program is not required pursuant to 40 CFR 125.66(c).

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

Under 40 CFR 125.66(d), the applicant must submit a proposed public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into its POTW.

The draft permit includes a requirement in Section I for the permittee to develop and implement a non-industrial source control program pursuant to 40 CFR 125.66(d).

(4) Increase in Effluent Volume or Amount of Pollutants Discharged [40 CFR 125.67]

(5) 40 CFR 125.67(a) states that the applicant's discharge may not result in any new or substantially increased discharges of the pollutant to which the modification applies above the discharge specified in the Section 301(h) modified permit.

The SSD discharge will not result in any substantially increased discharge of these pollutants. The first tier flow limits and corresponding BOD/TSS mass limits have increased less than 6 % so as to use the best estimate of current system flows. The second or final tier effluent flow limit of 175,000 has not changed.

All other limits in the draft permit are as 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.

(6) 40 CFR 125.67(b) requires that where pollutants discharges are attributable in part to combined sewer overflows, the applicant minimize existing overflows and prevent increases in the amount of pollutants discharged.

There are no CSOs associated with SSD collection system. Therefore, SSD is in compliance with 40 CFR 125.67(b).

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

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

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

The NPDES permit contains such effluent limits and mass loadings.

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

(3) 40 CFR 125.68(b)(1), Pretreatment program development required by section 125.66(c).

SSD has no industrial discharges to its collection system and so is not required by 40 CFR 125.66(c) to have a pretreatment program. Therefore, the permit does not require the development of such a program.

(4) 40 CFR 125.68(b)(2), Nonindustrial toxics control program required by section 125.66(d).

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.

(5) 40 CFR 125.68(b)(3), Control of combined sewer overflows required by section 125.67.

There are no CSOs associated with SSD's collection system. Therefore, no schedule is required.

F. Biological monitoring requirements of section 125.63(b). [40 CFR 125.68(c)(1)]

As described in Section D, monitoring conducted in 1995, in accordance with the first 301(h) permit showed that the discharge was not affecting the biological community in the vicinity of the discharge. Because the discharge has not appreciably changed since the study was conducted, and in recognition of the difficulty in performing ambient monitoring, EPA has not required a biological monitoring program in the draft permit

G. Water quality requirements of section 125.63(c). [40 CFR 125.68(c)(2)].

In recognition of the composition of the wastewater, (comprised of domestic and commercial entities) and the significant dilution provided, EPA believes that receiving water quality monitoring is not necessary.

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

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

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

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

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

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

A. A. State Coastal Zone Management Program

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

B. Endangered or Threatened Species

The National Marine Fisheries Service (NMFS), within the National Oceanographic and Atmospheric Administration (NOAA) is responsible for making the determination that the SSD discharge will not harm endangered or threatened species. The EPA has consulted with - NMFS on Endangered Species Act (ESA) requirements and NMFS was provided with a copy of the largely similar previous 30-day formal draft (2011) permit and fact sheet. NMFS will have an opportunity to review this document with the revised draft permit and fact sheet.

The Regional Administrator for NMFS, Patricia A. Kurkul, issued a letter dated March 1, 2011 to both EPA and the Department. NMFS determined that "… the discharges authorized by this permit will not have more than a minor detrimental effect on Atlantic salmon or shortnose sturgeon in this action area." EPA initiated consultation by letter dated April 5, 2017 to Kimberly Damon-Randall of NOAA'S National Marine Fisheries Service Protected Resources Division. EPA and the Department will continue consultation with NMFS if new information pertaining to the facility arises.

C. Marine Protection, Research and Sanctuaries Act

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

D. Essential Fish Habitat (EFH)

Under the 1996 Amendments (PL 104-297) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Service (NMFS) if EPA's actions, or proposed actions that EPA funds, permits, or undertakes, "may adversely impact any essential fish habitat." 16 U.S.C. § 1855(b). The Amendments broadly define essential fish habitat as, "... those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." 16 U.S.C. § 1802(10). Adverse effect means any impact which reduces the quality and/or quantity of EFH. 50 C.F.R. § 600.910(a).

Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. Id.

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

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

IX. STATE CONCURRENCE IN VARIANCE

Permittees may not be granted a Section 301(h) variance, as specified under Section 301(h) of the Act and 40 CFR 125.59(i), until the appropriate State certification/concurrence is granted or waived pursuant to 40 CFR 124.54.

A Section 301(h) waiver may not be granted if the State denies certification/ concurrence pursuant to 40 CFR 124.54. EPA expects that the State of Maine will make such a determination upon review of the proposed draft permit conditions.

X. CONCLUSION

EPA has determined that SSD 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 CFR Part 125, Subpart G.

XI. TENTATIVE DECISION

For the reasons discussed in this tentative decision document, EPA is tentatively approving SSD request to discharge primary effluent to the Deer Island Thorofare. This tentative decision is contingent upon the following conditions:

1. SSD treatment system maintaining a 12-month rolling average of 30 % removal of BOD_5 and 50% removal TSS (Maine BPT and Section 401 Water Quality Certification condition), and;

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

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

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

XII. PUBLIC COMMENTS

The new public notice will be placed on the EPA Region I NPDES website at: http://www.epa.gov/region1/npdes/me.html. All recipients of the previous draft tentative waiver decision will receive notice of the availability of the new draft for comment. All aspects of the new draft are open to comment during the 30 day public notice comment period. In its final permit and waiver decisions, EPA shall address the comments received in response to the previous public notice as well as those submitted in response to these new drafts.

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 U.S. EPA, Office of Ecosystem Protection, 5 Post Office Square, Suite 100, Boston, Massachusetts 02109-3912, Attn: Doug Corb. Any person, prior to such date, may submit a request in writing for a public hearing to consider the tentative waiver decision to EPA. Such requests shall state the nature of the issues proposed to be raised in the hearing. Public hearings may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates a significant public interest. In reaching a final decision on the tentative waiver decision, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period and after a public hearing, if such a hearing is held, the Regional Administrator will issue a final decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Additional information concerning this tentative decision may be obtained from and written comments should be directed to:

Doug Corb
U.S. Environmental Protection Agency
Mail Code – OEP06-1
5 Post Office Square – Suite 100
Boston, MA 02109-3912
Phone: 617-918-1565
Email: corb.doug@epa.gov

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ENVIRONMENTAL PROTECTION
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MANAGEMENT
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UNITED STATE ENVIRONMENTAL
PROTECTION AGENCY
OFFICE OF ECOSYSTEM
PROTECTION
MAIL CODE – OEP06-4
5 POST OFFICE SQUARE – SUITE 100
BOSTON, MA 02109-3912

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.

DATE OF NOTICE: August 17, 2017

PERMIT NUMBER: **ME0101851**

PUBLIC NOTICE NUMBER: ME-01-17

NAME AND MAILING ADDRESS OF APPLICANT:

Stonington Sanitary District
P.O Box 175
Stonington ME, 04681

NAME AND ADDRESS OF THE FACILITY WHERE DISCHARGE OCCURS:

Stonington Sanitary District
Cross Road
Stonington ME, 04681

RECEIVING WATER: Stonington Harbor/Deer Island Thorofare, East Penobscot Bay -Class SB

PREPARATION OF THE DRAFT PERMIT:

The U.S. Environmental Protection Agency (EPA) and the Maine Department of Environmental Protection (MDEP) 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 the State certify this draft permit with the waiver from secondary treatment, pursuant to Section 401 of the Clean Water Act and expects that the draft permit will be certified.

INFORMATION ABOUT THE DRAFT PERMIT:

The draft permit, Tentative Clean Water Act Section 301(h) Waiver from Secondary Treatment Decision Document, and explanatory fact sheet may be obtained at no cost at http://www.epa.gov/region1/npdes/draft_permits_listing_me.html or by contacting:

Doug Corb
U.S. Environmental Protection Agency – Region 1
5 Post Office Square, Suite 100 (OEP06-1)
Boston, MA 02109-3912
Telephone: (617) 918-1565
E-mail: corb.doug@epa.gov

The administrative record containing all documents relating to this draft permit and secondary treatment waiver decision including all data submitted by the applicant may be inspected at the EPA Boston office mentioned above between 9:00 a.m. and 5:00 p.m., Monday through Friday, except holidays.

PUBLIC COMMENT AND REQUEST FOR PUBLIC HEARING:

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 9/15/2017 to the address listed above. Any person, prior to such date, may submit a request in writing to EPA and MDEP 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 thirty-day public notice whenever the Regional Administrator finds that 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.

Brian Kavanah, Director
Division of Water Quality Management
Bureau of Land and Water Quality
Maine Department of Environmental Protection

Art Johnson, Acting Director
Office of Ecosystem Protection
EPA-Region