#### 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 <u>et seq.</u>; the "CWA"), and Title 38 Maine Revised Statutes § 414-A <u>et seq.</u>,

## Bayville Village Corporation 27 Sea St Boothbay Harbor, Maine 04538

is authorized to discharge from a facility located at

#### 10 Briggs Lane, Boothbay Harbor, Maine

to receiving water named Linekin 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 September 16, 2008. 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 (April, 2018), and Attachment A Effluent Mercury Test Report.

Signed this 22nd day of March, 2019

Signed this 14th day of March, 2019

/S/SIGNATURE ON FILE

Ken Moraff, Director Office of Ecosystems Protection Environmental Protection Agency Boston, Massachusetts /S/SIGNATURE ON FILE

Gerald D. Reid, Commissioner Maine Department of Environmental Protection Augusta, Maine PERMIT /LICENSE

#### IN THE MATTER OF

BAYVILLE VILLAGE CORPORATION	)	NATIONAL POLLUTANT
BOOTHBAY HARBOR, LINCOLN COUNTY,	)	DISCHARGE ELIMINATION SYSTEM
PUBLICLY OWNED TREATMENT WORKS	)	
ME0101664	)	WASTE DISCHARGE LICENSE
W002573-6B-F-R	)	
	)	
APPROVAL	)	RENEWAL

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 U.S.C., Section 1251, et seq., and 38 M.R.S., § 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 Bayville Village Corporation (BVC or Village hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

#### **APPLICATION SUMMARY**

The Town has applied for renewal of a combined National Pollutant Discharge Elimination System (NPDES) permit #ME0101664 and Maine Waste Discharge License (WDL) # W002573 that was issued on September 16, 2008 and expired on September 17, 2013. The permit/license (permit) authorizes the discharge of up to a monthly average flow of 0.015 million gallons per day (MGD) of primary treated sanitary waste water to Linekin Bay, Class SB, in Boothbay Harbor, Maine.

#### **PERMIT SUMMARY**

This permitting action is similar to the previous permitting action in that it carries forward;

- 1. The monthly average flow limitation of 0.015 MGD (but is being expressed in gallons per day (gpd)).
- 2. The monthly average technology-based requirements to achieve a minimum of 30% removal of biochemical oxygen demand (BOD) and a minimum of 50% removal for total suspended solids (TSS).
- 3. The monthly average technology based mass limitations for BOD and TSS.
- 4. The reporting requirement for settleable solids.
- 5. The maximum concentration limit for total residual chlorine.
- 6. The pH limits and testing frequency.

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

- 1. Increasing the dilution factors associated with the facility, based on updated an extended outfall.
- 2. Including enterococci limits based on the reasonable potential of the treated effluent to cause or contribute to an exceedance of the state bacterial criteria to protect the recreational designated use.
- 3. Including updated fecal coliform limits consistent with the recommendations in the 2013 National Shellfish Sanitation Program Guidelines and the year-round designated shellfishing use in Maine's water quality standards.
- 4. Including total mercury limits consistent with Maine 06-096 Chapter 519: Interim Effluent Limitations and Controls for the Discharge of Mercury.

## CONCLUSIONS

BASED on the findings in the Fact Sheet, dated December 20, 2018 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. The provisions of the State's antidegradation policy, 38 M.R.S. § 464(4)(F), will be met, in that:
  - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
  - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and

- (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

## ACTION

THEREFORE, the USEPA and the Department APPROVE the above noted application of the BAYVILLE VILLAGE CORPORATION, to discharge up to a monthly average of 15,000 gpd of primary treated waste waters to Linekin Bay, Class SB, in Boothbay Harbor, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

- 1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, and EPA NPDES Part II, Standard Conditions, April 2018) copies attached.
- 2. The Conditions on the following pages.
- 3. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto shall remain in effect until a final decision on the renewal application becomes effective (See 40 C.F.R. §122 6). [Maine Administrative Procedure Act, 5 M.R.S. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR Ch. 2(21)(A) (effective June 9, 2018)].

Date of initial receipt of application:October 9, 2013Date of application acceptance:October 9, 2013

#### SPECIAL CONDITIONS

#### A. **REGULATORY AUTHORITY**

- 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. § 414-A et seq., and applicable regulations. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 C.M.R. 3.19, are hereby incorporated by reference into this surface water discharge permit/license (permit 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 a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit/license is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a WDL issued by the State of Maine.

## **B.** EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

Effluent Characteristic	Discharge Limitations			Monitoring Requirement		
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	15,000 gpd [07]				Continuous [99/99]	Recorder [RC]
BOD [00310]	25 lbs/day [26]	Report lbs/day [26]	203 mg/L [19]	Report, mg/L [19]	1/Month [01/30]	Composite [24]
BOD % Removal <sup>(1)</sup> [50076]			30 % [23]		1/Month [01/30]	Calculate[CA]
TSS [00530]	18 lbs/day [26]	Report lbs/day [26]	145 mg/L <i>[19]</i>	Report, mg/L [19]	1/Month [01/30]	Composite [24]
TSS % Removal <sup>(1)</sup> [81011]			50 % [23]		1/Month [01/30]	Calculate[CA]
Settleable Solids [00545]				Report (ml/L) [25]	1/Month [01/30]	Grab [GR]
Fecal Coliform Bacteria <sup>(2)</sup> [31615]			14 cfu/100 ml	31 cfu/100ml [30]	2/Month [02/30]	Grab [GR]
Enterococci bacteria <sup>(2,4)</sup> [61211] (April 15th – October 31 <sup>st</sup> each year)			8 cfu/100 ml [30]	54 cfu/100 ml [30]	2/Month [02/30]	Grab [GR]
Total Residual Chlorine <sup>(3,4)</sup> [50060]				1.0 mg/L [19]	3/Week [03/07]	Grab [GR]
Mercury (Total) <sup>(4,5)</sup> [71900]			46 ng/L <i>[3M]</i>	69 ng/L <i>[3M]</i>	1/Year [01/YR]	Grab <sub>[GR]</sub>
pH (Std. Units) [00400]	The pH must not	be less than 6.0 or g	reater than 9.0 at a	ny time.	1/Week [01/07]	Grab [GR]

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

## Footnotes

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

## Calculating BOD<sub>5</sub> Monthly Average 30% Removal Limit

 $\frac{(290 \text{ mg/L} - \text{X mg/L}) * (100\%)}{(290 \text{ mg/l})} = \text{Y \% Removal}$ 

Where 290 mg/L is the default influent BOD<sub>5</sub> Concentration in mg/L X = Monthly Average BOD<sub>5</sub> effluent concentration in mg/L Y = Actual Monthly Average BOD<sub>5</sub> Percent Removal

## Calculating TSS Monthly Average 50% Removal Limit

 $\frac{(290 \text{ mg/L} - \text{X mg/L}) * (100\%)}{(290 \text{ mg/L})} = \text{Y \% Removal}$ 

Where 290 mg/L is the default influent TSS Concentration in mg/L X = Monthly Average TSS effluent concentration in mg/L Y = Actual Monthly Average TSS Percent Removal

- 2. Fecal coliform and enterococci bacteria The monthly average limits for fecal coliform and enterococci are expressed as and must be reported as a geometric mean. Enterococci bacteria limitations and monitoring requirements are in effect between April 15<sup>th</sup> October 31<sup>st</sup> of each year, beginning April 15, 2020. 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.
- 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 must utilize approved test methods that are capable of bracketing the limitations in this permit.
- 4. Required for State Certification.
- 5. Mercury All mercury sampling (1/Year) required to determine compliance with interim limitations established pursuant to Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 CMR 519 (last amended October 6, 2001) must be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses must be conducted in accordance with EPA Method 1631E, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See Attachment A, Effluent Mercury Test Report, of this permit for the Department's form for reporting mercury test results. Compliance with the

monthly average will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

#### 2. Sampling

Sampling for all parameters must be collected after the last treatment process prior to discharge to the receiving water. Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (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 the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to Waste Discharge Licenses 38 M.R.S. § 413 are subject to the provisions and restrictions of Maine Comprehensive and Limited Environmental Laboratory Certification Rules, 10-144 CMR 263 (last amended April 1, 2010). 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 this permit, all results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the permittee must monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. § 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the analysis of pollutants or pollutant parameters limited except WET). A method is considered "sufficiently sensitive" when: (1) The method minimum level (ML) is at or below the level of the effluent limit established in this permit for the measured pollutant or pollutant parameter; or (2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. § 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may

be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor. When a parameter is not detected above the ML, the permittee must report the data qualifier signifying less than the ML for that parameter (e.g.,  $<50\mu g/L$ , if the ML for a parameter is 50  $\mu g/L$ ).

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

- 1. Toxics Control
- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards

## C. NARRATIVE EFFLUENT LIMITATIONS

- 1. The effluent must not contain a visible oil sheen, foam or floating solids at any time or which would impair the uses designated by the classification of the receiving waters.
- 2. The effluent must not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated by the classification of the receiving waters.
- 3. The discharge must not impart visible discoloration, taste, toxicity, radioactivity, or turbidity in the receiving waters which would impair the uses 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 (specific to Maine DEP)

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*, 32 M.R.S. § 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 CMR Ch. 531 (effective May 8, 2006). All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

## E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on October 9, 2013. 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of waste water from any other point source are not authorized under this permit and must be reported in accordance with Standard Condition D(1)(f), 24-hour reporting, of this permit.

## F. NOTIFICATION REQUIREMENT

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

- 1. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.
- 2. For the purposes of this section, adequate notice must include information on:
  - a. The quality or quantity of waste water introduced to the waste water collection and treatment system;
  - b. Any anticipated impact of the change in the quality or quantity of the waste water to be discharged from the treatment system and
  - c. Prohibitions concerning interference and pass-through: pollutants introduced into POTW's by a non-domestic source (user) must not pass through the POTW or interfere with the operation or performance of the works.

## G. WET WEATHER FLOW MANAGEMENT PLAN

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

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

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

## H. OPERATIONS AND MAINTENANCE FOR THE TREATMENT PLANT

This facility must maintain a current written comprehensive Operation & Maintenance (O&M) Plan. The plan must provide a systematic approach by which the permittee must at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

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

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

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

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

## I. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

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

1. Maintenance Staff

The permittee must provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Preventive Maintenance Program

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

3. Infiltration/Inflow

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

## 4. Collection System Mapping

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

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

- 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.

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

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

- 1. Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
- 2. Changes in the operation of the treatment works that may increase the toxicity of the discharge; and
- 3. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.
- 4. In addition, in the comments section of the certification form, the permittee must provide the Department with statements describing;
  - 1. Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.
  - 2. Increases in the type or volume of hauled wastes accepted by the facility.
- 5. The Department reserves the right to require annual (surveillance level) testing or other toxicity testing if new information becomes available that indicates the discharge may cause

or have a reasonable potential to cause exceedances of ambient water quality criteria/thresholds.

## K. SEPTAGE USE/DISPOSAL

- 1. The permittee must comply with all existing federal and state laws and regulations that apply to septage use and disposal practices, including EPA regulations promulgated at 40 C.F.R. Part 503.
- 2. If both state and federal requirements apply to the permittee's septage use and/or disposal practices, the permittee must comply with the more stringent of the applicable requirements.
- 3. The permittee must submit an annual report containing the information specified in the 40 C.F.R. Part 503 requirements by February 19. Reports must be submitted to the address contained in the reporting section of the permit. If the permittee engages a contractor or contractors for septage preparation and ultimate use or disposal, the annual report need contain only the following information:
  - a. Name and address of contractor(s) responsible for sludge preparation, use or disposal.
  - b. Quantity of septage from the POTW that is transferred to the sludge contractor(s), and the method(s) by which the contractor will prepare and use or dispose of the septage.

## L. MONITORING AND REPORTING

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

- 1. Electronic DMRs submitted using the EPA CDX system, must be:
  - a. Submitted by a facility authorized signatory; and
  - b. Submitted no later than midnight on the 15th day of the month following the completed reporting period.
- 2. Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP Toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email.
- 3. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your CDX submittal will suffice. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

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4. 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 must 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 617-918-1746

#### M. 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.

#### **RESPONSE TO COMMENTS**

## REISSUANCE OF NPDES PERMIT AND WAIVER FROM SECONDARY TREATMENT NO. ME0101664 BAYVILLE VILLAGE CORPORATION WASTEWATER TREATMENT FACILITY BOOTHBAY HARBOR, ME

In accordance with the provisions of 40 C.F.R. § 124.17, this document presents the U.S. Environmental Protection Agency's (EPA or Region 1) responses to comments received on the draft National Pollutant Discharge Elimination System (NPDES) Permit, ME0101664 (Draft Permit). From December 26, 2018 through February 1, 2019, EPA and the Maine Department of Environmental Protection (MEDEP) solicited public comments on the Draft NPDES Permit and 301(h) Waiver from Secondary Treatment developed pursuant to an application submitted by the Stonington Sanitary District (SSD or permittee) for the reissuance of its 301(h) Waiver and permit to discharge to the designated receiving waters. 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 EPA to administer the NPDES permit program in Maine on January 12, 2001, the Clean Water Act does not allow delegation of the 301(h) Waiver process to States. Therefore, issuance of a permit granting such a variance may only be issued by the EPA.

EPA and MEDEP received comments from Chris Higgins, Superintendent, Boothbay Harbor Sewer District, dated January 17, 2019. Following a review of the comments received, EPA has made a final decision to issue the permit authorizing this discharge. Although EPA's knowledge of the facility has benefited from the various comments and additional information submitted, the information and arguments presented did not raise any substantial new questions concerning the permit. Below are EPA's responses to public comments with descriptions of any changes made to the public-noticed permit as a result of those comments. Unless noted, we state the comments exactly as BVC presents them with no edits. The responses to comments explain and support the EPA determinations that form the basis of the Final Permit.

A copy of the Final Permit may be obtained by calling or writing Douglas MacLean, USEPA, 5 Post Office Square – Suite 100, Mail Code OEP06-04, Boston, Massachusetts 02109-3912; Telephone (617)-918-1608. Copies of the Final Permit and the Response to Comments may also be obtained from the EPA Region I Website at <u>http://www.epa.gov/region1/npdes/index.html</u>.

#### A. Summary of Changes to the Final Permit

1. The monitoring frequency for settleable solids is changed from 1/week to 1/month. (See Response 2)

- 2. Since the public comment period, it has come to EPA and MEDEP's attention that, due to the current scarcity of nearby laboratories capable of enterococci monitoring, complying with the enterococci limits may be difficult without an exception in 06-096 Code of Maine Rules, Chapter 26, Section I.B.2 allowing laboratories operated by wastewater discharge facilities licensed pursuant to 38 MRS 413 to test for enterococci bacteria. Maine DEP reports that there is currently a bill proposed in the Maine legislature, which would add enterococci to the list of exceptions. If passed, it will become effective on October 1, 2019. The final permit delays the implementation of the new enterococcus limit and monitoring requirements until April 15, 2020 to allow time for passage and implementation of this bill.
- 3. Formatting and typographical errors have been corrected.

## **Comments and Responses to Comments:**

## **Comment 1 - Seasonal Monitoring**

As you are aware, Bayville Village Corporation is a quasi-municipal corporation, which owns the Bayville Village sewer system. Bayville Village is a seasonal community comprised of 50 residences. 25 of the residences are connected to the sewer system. The Boothbay Harbor Water District supplies water to the community. Water is supplied to the community from the 1<sup>st</sup> of May (latest date) to the third Thursday of October annually.

On page 6 of 14 of the draft permit, specifically, Section B.1, monitoring requirements are presented with a year-round frequency. As noted above, Bayville Village is a seasonal community pursuant to water service availability and, therefore, year-round monitoring is not warranted. Bayville Village is requesting that the monitoring frequency be listed as seasonal from April 1 to October 31 annually. This frequency was incorporated in the 2002 permit but was left out of the 2008 permit. I have included a letter from Gregg Wood, MeDEP supporting the April 1 – October 31 monitoring season. There is language in the draft allowing EPA and DEP to implement year-round monitoring should the need arise.

## **Response 1**

After reviewing a 2008 letter from Gregg Wood, and having a phone conversation with Chris Higgins, it was determined that there are still two residences receiving water service, and discharging, all year-round. In accordance with the CWA Section 301(a), the discharge of pollutants from a point source is unlawful, unless the discharge is in compliance with an effective NPDES permit. There are no exceptions provided in the CWA for de minimus discharges. Thus, BVC is required to maintain its treatment and monitoring, all year-round.

## Comment 2

The monitoring frequency for settleable solids in this draft permit has changed to 1/week. I have included the highlighted line in Section B.1 contained herein. The 2008 permit had changed this frequency from three times per week to once per month. I have attached pages 3 of 11 and 5 of 11 of the 2008 permit outlining the monitoring frequency. The observed monitoring data, since the 2008 permit issuance, does not support increasing the frequency to once per week. Therefore, Bayville Village requests the monitoring frequency stay the same as in the 2008 permit at once per month.

## **Response 2**

Monitoring frequency for settleable solids of 1/week, as listed in the permit, was a typo, and EPA concurs that monitoring for settleable solids should be 1/month.

#### BAYVILLE VILLAGE CORPORATION, MAINE ) PUBLICLY OWNED TREATMENT WORKS, ) APPLICATION FOR SECTION 301(h) ) VARIANCE FROM THE SECONDARY ) TREATMENT REQUIREMENTS OF THE ) CLEAN WATER ACT )

FINAL DECISION OF THE REGIONAL ADMINISTRATOR PURSUANT 40 C.F.R. PART 125, SUBPART G

The Bayville Village Corporation (BVC) operates a publicly owned treatment works (POTW) located in Boothbay Harbor, Maine. The POTW is authorized to discharge up to a 12-month rolling average flow of 15,000 gallons per day. The Village has submitted a waiver (from secondary treatment requirements) application pursuant to Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987 (the Act). It is my final decision to grant the request by BVC for renewal of a National Pollutant Discharge Elimination System (NPDES) permit as modified under Section 301(h) of the Clean Water Act.

The basis for this decision is described in the draft 301(h) modified permit fact sheet for the Village's Wastewater Treatment Plant and Ocean Outfall and the 301(h) Tentative Decision Document public noticed by USEPA on December 27, 2018.

The USEPA received the Village's renewal application on October 9, 2013. A tentative decision to approve the application was public noticed on December 27, 2018. Concurrently, the USEPA and the State of Maine jointly proposed reissuance of a draft 301(h) modified NPDES permit incorporating both federal NPDES and State Waste Discharge Requirements. The USEPA and Maine DEP revised the draft permit based, in part, on public comments.

This Final Decision and the waiver to which it pertains, will become effective and expire concurrently with NPDES permit unless an appeal is filed with Environmental Appeals Board within 30 days of the final issuance of the permit.

Date: \_\_\_\_March 25, 2019\_\_\_\_\_

## /S/SIGNATURE ON FILE

Deborah A. Szaro Acting Regional Administrator Environmental Protection Agency Region I

#### 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 <u>et seq.</u>; the "CWA"), and Title 38 Maine Revised Statutes § 414-A <u>et seq.</u>,

## Bayville Village Corporation 27 Sea St Boothbay Harbor, Maine 04538

is authorized to discharge from a facility located at

#### 10 Briggs Lane, Boothbay Harbor, Maine

to receiving water named Linekin 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 September 16, 2008. 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), and Attachment A Effluent Mercury Test Report.

Signed this \_\_\_\_\_day of \_\_\_\_\_

Signed this _	day of	
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Ken Moraff, Director Office of Ecosystems Protection Environmental Protection Agency Boston, Massachusetts Melanie Loyzim, Commissioner Maine Department of Environmental Protection Augusta, Maine ME0101664 W002573-6B-H-R

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

#### **IN THE MATTER OF**

APPROVAL	)	RENEWAL
	)	
W002573-5L-F-R	)	
ME0101664	)	WASTE DISCHARGE LICENSE
PUBLICLY OWNED TREATMENT WORKS	)	
BOOTHBAY HARBOR, LINCOLN COUNTY,	)	DISCHARGE ELIMINATION SYSTEM
BAYVILLE VILLAGE CORPORATION	)	NATIONAL POLLUTANT

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 U.S.C., Section 1251, et seq., and 38 M.R.S., § 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 Bayville Village Corporation (BVC or Village hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

#### **APPLICATION SUMMARY**

The Town has applied for renewal of a combined National Pollutant Discharge Elimination System (NPDES) permit #ME0101664 and Maine Waste Discharge License (WDL) # W002573 that was issued on September 16, 2008 and expired on September 17, 2013. The permit/license (permit) authorizes the discharge of up to a monthly average flow of 0.015 million gallons per day (MGD) of primary treated sanitary waste water to Linekin Bay, Class SB, in Boothbay Harbor, Maine.

## PERMIT SUMMARY

This permitting action is similar to the previous permitting action in that it carries forward;

- 1. The monthly average flow limitation of 0.015 MGD (but is being expressed in gallons per day (gpd)).
- 2. The monthly average technology-based requirements to achieve a minimum of 30% removal of biochemical oxygen demand (BOD) and a minimum of 50% removal for total suspended solids (TSS).
- 3. The monthly average technology based mass limitations for BOD and TSS.
- 4. The daily maximum concentration reporting requirement for settleable solids.
- 5. The daily maximum concentration limit for total residual chlorine.

6. The pH limits and testing frequency.

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

- 1. Increasing the dilution factors associated with the facility, based on updated an extended outfall.
- 2. Including enterococci limits based on the reasonable potential of the treated effluent to cause or contribute to an exceedance of the state bacterial criteria to protect the recreational designated use.
- 3. Including updated fecal coliform limits consistent with the recommendations in the 2013 National Shellfish Sanitation Program Guidelines and the year-round designated shellfishing use in Maine's water quality standards.
- 4. Including total mercury limits consistent with Maine 06-096 Chapter 519: Interim Effluent Limitations and Controls for the Discharge of Mercury.

## CONCLUSIONS

BASED on the findings in the Fact Sheet, dated December 20, 2018 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. The provisions of the State's antidegradation policy, 38 M.R.S. § 464(4)(F), will be met, in that:
  - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
  - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

- (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
- (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 1. The discharge will be subject to effluent limitations that require application of best practicable treatment.
- 2. Including total mercury limits consistent with Maine 06-096 Chapter 519: Interim Effluent Limitations and Controls for the Discharge of Mercury.

## ACTION

THEREFORE, the USEPA and the Department APPROVE the above noted application of the BAYVILLE VILLAGE CORPORATION, to discharge up to a monthly average of 15,000 gpd of primary treated waste waters to Linekin Bay, Class SB, in Boothbay Harbor, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

- "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, and EPA NPDES Part II, Standard Conditions, April 2018) copies attached.
- 2. The Conditions on the following pages.
- 3. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto shall remain in effect until a final decision on the renewal application becomes effective (See 40 C.F.R. §122 6). [Maine Administrative Procedure Act, 5 M.R.S.. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR Ch. 2(21)(A) (effective April 1, 2003)].

## PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application:	October 9, 2013
Date of application acceptance:	October 9, 2013

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

#### SPECIAL CONDITIONS

#### A. **REGULATORY AUTHORITY**

- 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. § 414-A et seq., and applicable regulations. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 C.M.R. 3.19, are hereby incorporated by reference into this surface water discharge permit/license (permit 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 a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit/license is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a WDL issued by the State of Maine.

## **B.** EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

Effluent Characteristic	Discharge Limitations				Monitoring Requirement		
	<u>Monthly</u> Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	
Flow [50050]	15,000 gpd [07]				Continuous [99/99]	Recorder [RC]	
BOD [00310]	25 lbs/day [26]	Report lbs/day [26]	203 mg/L [19]	Report, mg/L [19]	1/Month [01/30]	Composite [24]	
BOD % Removal <sup>(1)</sup> [50076]			30 % [23]		1/Month [01/30]	Calculate[CA]	
TSS [00530]	18 lbs/day [26]	Report lbs/day [26]	145 mg/L <i>[19]</i>	Report, mg/L [19]	1/Month [01/30]	Composite [24]	
TSS % Removal <sup>(1,4)</sup> [81011]			50 % [23]		1/Month [01/30]	Calculate[CA]	
Settleable Solids [00545]				Report (ml/L) [25]	1/Week [01/07]	Grab [GR]	
Fecal Coliform Bacteria <sup>(2)</sup> [31615]			14 cfu/100 ml	31 cfu/100ml [30]	2/Month [02/30]	Grab [GR]	
Enterococci bacteria <sup>(2,4)</sup> [61211] (April 15th – October 31 <sup>st</sup> each year)			8 cfu/100 ml [30]	54 cfu/100 ml [30]	2/Month [02/30]	Grab [GR]	
Total Residual Chlorine <sup>(3,4)</sup> [50060]				1.0 mg/L [19]	3/Week [03/07]	Grab [GR]	
Mercury (Total) <sup>(4,5)</sup> [71900]			46 ng/L [3M]	69 ng/L <i>[3M]</i>	1/Year [01/YR]	Grab <sub>[GR]</sub>	
pH (Std. Units) [00400]	The pH must not	be less than 6.0 or g		ny time.	1/Week [01/07]	Grab [GR]	

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

#### Footnotes

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

#### Calculating BOD<sub>5</sub> Monthly Average 30% Removal Limit

 $\frac{(290 \text{ mg/L} - \text{X mg/L}) * (100\%)}{(290 \text{ mg/l})} = \text{Y \% Removal}$ 

Where 290 mg/L is the default influent BOD<sub>5</sub> Concentration in mg/L X = Monthly Average BOD<sub>5</sub> effluent concentration in mg/L Y = Actual Monthly Average BOD<sub>5</sub> Percent Removal

## Calculating TSS Monthly Average 50% Removal Limit

 $\frac{(290 \text{ mg/L} - \text{X mg/L}) * (100\%)}{(290 \text{ mg/L})} = \text{Y \% Removal}$ 

Where 290 mg/L is the default influent TSS Concentration in mg/L X = Monthly Average TSS effluent concentration in mg/L Y = Actual Monthly Average TSS Percent Removal

2. Fecal coliform and enterococci bacteria – The monthly average limits for fecal coliform and enterococci are expressed as and must be reported as a geometric mean. Enterococci bacteria limitations and monitoring requirements are in effect between April 15<sup>th</sup> – October 31<sup>st</sup> 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.

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

4. Required for State Certification.

5. Mercury – All mercury sampling (1/Year) required to determine compliance with interim limitations established pursuant to Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 CMR 519 (last amended October 6, 2001) must be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses must be conducted in accordance with EPA Method 1631E, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See Attachment A, Effluent Mercury Test Report, of this permit for the Department's form for reporting mercury test results. Compliance with the monthly average will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

## 2. Sampling

Sampling for all parameters must be collected after the last treatment process prior to discharge to the receiving water. Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (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 the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to Waste Discharge Licenses 38 M.R.S. § 413 are subject to the provisions and restrictions of Maine Comprehensive and Limited Environmental Laboratory Certification Rules, 10-144 CMR 263 (last amended April 1, 2010). 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 this permit, all results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the permittee must monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. § 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the analysis of pollutants or pollutant parameters limited except WET). A method is considered "sufficiently sensitive" when: (1) The method minimum level (ML) is at or below the level of the effluent limit established in this permit for the measured pollutant or pollutant parameter; or (2) The method has the lowest ML of the analytical methods approved under 40 C.F.R. § 136 or required under 40 C.F.R. Chapter I, Subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor. When a parameter is not detected above the ML, the permittee must report the data qualifier signifying less than the ML for that parameter (e.g., <50µg/L, if the ML for a parameter

is 50 µg/L).

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

## 4. Toxics Control

a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards

## C. NARRATIVE EFFLUENT LIMITATIONS

- 1. The effluent must not contain a visible oil sheen, foam or floating solids at any time or which would impair the uses designated by the classification of the receiving waters.
- 2. The effluent must not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated by the classification of the receiving waters.
- 3. The discharge must not impart visible discoloration, taste, toxicity, radioactivity, or turbidity in the receiving waters which would impair the uses 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 (specific to Maine DEP)

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

## E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on October 9, 2013. 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of waste water from any other point source are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), 24-hour reporting, of this permit.

## F. NOTIFICATION REQUIREMENT

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

- 1. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.
- 2. For the purposes of this section, adequate notice must include information on:
  - a The quality or quantity of waste water introduced to the waste water collection and treatment system;
  - b Any anticipated impact of the change in the quality or quantity of the waste water to be discharged from the treatment system and
- c Prohibitions concerning interference and pass-through: pollutants introduced into POTW's by a non-domestic source (user) must not pass through the POTW or interfere with the operation or performance of the works.

## G. WET WEATHER FLOW MANAGEMENT PLAN

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

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

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

## H. OPERATIONS AND MAINTENANCE FOR THE TREATMENT PLANT

This facility must maintain a current written comprehensive Operation & Maintenance (O&M) Plan. The plan must provide a systematic approach by which the permittee must at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. By December 31 of each year and within 90 days of any process changes or minor equipment upgrades [PCS Code 09699], the permittee must evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the waste water treatment facility to ensure that it is up-to-date. The O&M Plan must be kept on-site at all times and made available to Department and EPA personnel upon request.

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

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

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

## I. OPERATION AND MAINTENANCE OF THE SEWER SYSTEM

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

1. Maintenance Staff

The permittee must provide an adequate staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.

2. Preventive Maintenance Program

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

3. Infiltration/Inflow

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

4. Collection System Mapping

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

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

- 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.

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

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

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

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

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

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

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

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

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

## K. SEPTAGE USE/DISPOSAL

- 1. The permittee must comply with all existing federal and state laws and regulations that apply to septage use and disposal practices, including EPA regulations promulgated at 40 C.F.R. Part 503.
- 2. If both state and federal requirements apply to the permittee's septage use and/or disposal practices, the permittee must comply with the more stringent of the applicable requirements.
- 3. The permittee must submit an annual report containing the information specified in the 40 C.F.R. Part 503 requirements. Reports must be submitted to the address contained in the reporting section of the permit. If the permittee engages a contractor or contractors for septage preparation and ultimate use or disposal, the annual report need contain only the following information:

a. Name and address of contractor(s) responsible for sludge preparation, use or disposal.

b. Quantity of septage from the POTW that is transferred to the sludge contractor(s), and the method(s) by which the contractor will prepare and use or dispose of the septage.

## L. MONITORING AND REPORTING

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

- 1. Electronic DMRs submitted using the EPA CDX system, must be:
  - a. Submitted by a facility authorized signatory; and
  - b. Submitted no later than midnight on the 15th day of the month following the completed reporting period.

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

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

4. Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, 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 must 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 617-918-1746

## M. 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.

## MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

#### 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).

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**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

#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

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- (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:

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- (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.

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**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.

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**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.

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

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

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

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

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

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

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

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

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

# NPDES PART II STANDARD CONDITIONS (April 26, 2018)<sup>1</sup>

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<sup>1</sup> Updated July 17, 2018 to fix typographical errors.

#### A. GENERAL REQUIREMENTS

#### 1. Duty to Comply

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

- a. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- b. Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (83 Fed. Reg. 1190-1194 (January 10, 2018) and the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note. See Pub. L.114-74, Section 701 (Nov. 2, 2015)). These requirements help ensure that EPA penalties keep pace with inflation. Under the above-cited 2015 amendments to inflationary adjustment law, EPA must review its statutory civil penalties each year and adjust them as necessary.
  - (1) Criminal Penalties
    - (a) Negligent Violations. The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less than \$2,500 nor more than \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation or by imprisonment of not more than 2 years, or both.
    - (b) Knowing Violations. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
    - (c) Knowing Endangerment. The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 303, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he or she is placing another person in imminent danger of death or serious bodily injury shall upon conviction be subject to a fine of not more than \$250,000 or by imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing

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

- (d) False Statement. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more tha
- (2) Civil Penalties. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).
- (3) *Administrative Penalties*. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty as follows:
  - (a) Class I Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).
  - (b) Class II Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).

#### 2. Permit Actions

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

condition.

#### 3. Duty to Provide Information

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

#### 4. Oil and Hazardous Substance Liability

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

#### 5. Property Rights

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

#### 6. Confidentiality of Information

- a. In accordance with 40 C.F.R. Part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 C.F.R. Part 2 (Public Information).
- b. Claims of confidentiality for the following information will be denied:
  - (1) The name and address of any permit applicant or Permittee;
  - (2) Permit applications, permits, and effluent data.
- c. Information required by NPDES application forms provided by the Director under 40 C.F.R. § 122.21 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.
- 7. Duty to Reapply

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

8. <u>State Authorities</u>

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

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

#### 9. Other Laws

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

# B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

#### 1. Proper Operation and Maintenance

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

#### 2. <u>Need to Halt or Reduce Not a Defense</u>

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. <u>Bypass</u>

- a. Definitions
  - (1) *Bypass* means the intentional diversion of waste streams from any portion of a treatment facility.
  - (2) *Severe property damage* means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. *Bypass not exceeding limitations*. The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this Section.
- c. Notice

- (1) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass. As of December 21, 2020 all notices submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or if required to do so by state law.
- (2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in paragraph D.1.e. of this part (24-hour notice). As of December 21, 2020 all notices submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or required to do so by law.
- d. Prohibition of bypass.
  - (1) Bypass is prohibited, and the Director may take enforcement action against a Permittee for bypass, unless:
    - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
    - (c) The Permittee submitted notices as required under paragraph 4.c of this Section.
  - (2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 4.d of this Section.

#### 5. Upset

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

improper operation.

- b. *Effect of an upset*. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph B.5.c. of this Section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. *Conditions necessary for a demonstration of upset.* A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An upset occurred and that the Permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated; and
  - (3) The Permittee submitted notice of the upset as required in paragraph D.1.e.2.b. (24-hour notice).
  - (4) The Permittee complied with any remedial measures required under B.3. above.
- d. *Burden of proof.* In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

#### C. MONITORING REQUIREMENTS

- 1. Monitoring and Records
  - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least 5 years (or longer as required by 40 C.F.R. § 503), the Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.
  - c. Records of monitoring information shall include:
    - (1) The date, exact place, and time of sampling or measurements;
    - (2) The individual(s) who performed the sampling or measurements;
    - (3) The date(s) analyses were performed;
    - (4) The individual(s) who performed the analyses;
    - (5) The analytical techniques or methods used; and
    - (6) The results of such analyses.
  - d. Monitoring must be conducted according to test procedures approved under 40 C.F.R. § 136 unless another method is required under 40 C.F.R. Subchapters N or O.
  - e. The Clean Water Act provides that any person who falsifies, tampers with, or

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

#### 2. Inspection and Entry

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

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

#### D. REPORTING REQUIREMENTS

#### 1. <u>Reporting Requirements</u>

- a. *Planned Changes*. The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. § 122.29(b); or
  - (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements at 40 C.F.R. § 122.42(a)(1).
  - (3) The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. *Anticipated noncompliance*. The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

- c. *Transfers*. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the Clean Water Act. *See* 40 C.F.R. § 122.61; in some cases, modification or revocation and reissuance is mandatory.
- d. *Monitoring reports*. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
  - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices. As of December 21, 2016 all reports and forms submitted in compliance with this Section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), § 122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to report electronically if specified by a particular permit or if required to do so by State law.
  - (2) If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 C.F.R. § 136, or another method required for an industry-specific waste stream under 40 C.F.R. Subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
  - (3) Calculations for all limitations which require averaging or measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.
- e. Twenty-four hour reporting.
  - (1) The Permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written report shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. As of December 21, 2020 all

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

- (2) The following shall be included as information which must be reported within 24 hours under this paragraph.
  - (a) Any unanticipated bypass which exceeds any effluent limitation in the permit. *See* 40 C.F.R. § 122.41(g).
  - (b) Any upset which exceeds any effluent limitation in the permit.
  - (c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. *See* 40 C.F.R. § 122.44(g).
- (3) The Director may waive the written report on a case-by-case basis for reports under paragraph D.1.e. of this Section if the oral report has been received within 24 hours.
- f. *Compliance Schedules*. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- g. Other noncompliance. The Permittee shall report all instances of noncompliance not reported under paragraphs D.1.d., D.1.e., and D.1.f. of this Section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph D.1.e. of this Section. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in paragraph D.1.e. and the applicable required data in Appendix A to 40 C.F.R. Part 127. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the Permittee to the Director or initial recipient, as defined in 40 C.F.R. § 127.2(b), in compliance with this Section and 40 C.F.R. Part 3 (including, in all cases, Subpart D to Part 3), §122.22, and 40 C.F.R. Part 127. Part 127 is not intended to undo existing requirements for electronic reporting. Prior to this date, and independent of Part 127, Permittees may be required to electronically submit reports related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section by a particular permit or if required to do so by state law. The Director may also require Permittees to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this Section.
- h. Other information. Where the Permittee becomes aware that it failed to submit any

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

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

#### 2. Signatory Requirement

- a. All applications, reports, or information submitted to the Director shall be signed and certified. *See* 40 C.F.R. §122.22.
- b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

#### 3. Availability of Reports.

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

#### E. DEFINITIONS AND ABBREVIATIONS

1. General Definitions

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

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

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

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

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

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

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

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

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

Bypass see B.4.a.1 above.

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

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

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

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

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

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

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

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

Direct Discharge means the "discharge of a pollutant."

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

#### Discharge

- (a) When used without qualification, *discharge* means the "discharge of a pollutant."
- (b) As used in the definitions for "interference" and "pass through," *discharge* means the introduction of pollutants into a POTW from any non-domestic source regulated under Section 307(b), (c) or (d) of the Act.

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

#### Discharge of a pollutant means:

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

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

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

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

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

Agency.

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

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

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

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

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

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

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

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

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

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

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

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

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

#### Municipality

- (a) When used without qualification *municipality* means a city, town, borough, county, parish, district, association, or other public body created by or under State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of CWA.
- (b) As related to sludge use and disposal, *municipality* means a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal Agency of two or more of the foregoing entities) created by or under State law; an Indian tribe or an authorized Indian tribal organization having jurisdiction over sewage sludge management; or a designated and approved management Agency under Section 208 of the CWA, as amended. The definition includes a special district created under State law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in Section 201 (e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use or disposal of sewage sludge.

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

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

- (a) From which there is or may be a "discharge of pollutants;"
- (b) That did not commence the "discharge of pollutants" at a particular "site" prior to August 13, 1979;
- (c) Which is not a "new source;" and
- (d) Which has never received a finally effective NPDES permit for discharges at that "site."

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

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

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

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

NPDES means "National Pollutant Discharge Elimination System."

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Upset see B.5.a. above.

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

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

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

- (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (b) All interstate waters, including interstate "wetlands;"
- (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands", sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
  - (1) Which are or could be used by interstate or foreign travelers for recreational or other purpose;
  - (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
- (d) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (f) The territorial sea; and
- (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

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

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

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

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

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

#### 2. <u>Commonly Used Abbreviations</u>

BOD	Five-day biochemical oxygen demand unless otherwise specified		
CBOD	Carbonaceous BOD		
CFS	Cubic feet per second		
COD	Chemical oxygen demand		
Chlorine			
Cl2	Total residual chlorine		
TRC	Total residual chlorine which is a combination of free available chlorine (FAC, see below) and combined chlorine (chloramines, etc.)		
TRO	Total residual chlorine in marine waters where halogen compounds are present		
FAC	Free available chlorine (aqueous molecular chlorine, hypochlorous acid, and hypochlorite ion)		
Coliform			
Coliform, Fecal	Total fecal coliform bacteria		
Coliform, Total	Total coliform bacteria		
Cont.	Continuous recording of the parameter being monitored, i.e. flow, temperature, pH, etc.		
Cu. M/day or M <sup>3</sup> /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		
NH3-N	Ammonia nitrogen as nitrogen		
NO3-N	Nitrate as nitrogen		
NO2-N	Nitrite as nitrogen		
NO3-NO2	Combined nitrate and nitrite nitrogen as nitrogen		
TKN	Total Kjeldahl nitrogen as nitrogen		
Oil & Grease	Freon extractable material		
PCB	Polychlorinated biphenyl		
Surfactant	Surface-active agent		
Temp. °C	Temperature in degrees Centigrade		
Temp. °F	Temperature in degrees Fahrenheit		
TOC	Total organic carbon		
Total P	Total phosphorus		
TSS or NFR	Total suspended solids or total nonfilterable residue		
Turb. or Turbidity	Turbidity measured by the Nephelometric Method (NTU)		
µg/L	Microgram(s) per liter		
WET	"Whole effluent toxicity"		
ZID	Zone of Initial Dilution		

Permit Attachment A

Maine Department of Environmental Protection

# **Effluent Mercury Test Report**

Name of Facility:	Federal Permit # ME		
Purpose of this test: Initial limit determinat Compliance monitorin Supplemental or extra	g for: year calendar quarter		
Sampling Date: mm dd yy	Sampling time:AM/PM		
Sampling Location:			
Weather Conditions:			
Please describe any unusual conditions with the time of sample collection:	influent or at the facility during or preceding the		
Optional test - not required but recommended w evaluation of mercury results:	here possible to allow for the most meaningful		
Suspended Solidsmg/L Sam	ple type: Grab (recommended) or Composite		
ANALYTICAL RESULT	FOR EFFLUENT MERCURY		
Name of Laboratory:			
Date of analysis:	Result: ng/L (PPT)		
Please Enter Effluent Limits			
Effluent Limits: Average =ng/L	Maximum =ng/L		
Please attach any remarks or comments from the their interpretation. If duplicate samples were ta	laboratory that may have a bearing on the results or ken at the same time please report the average.		
CERTI	FICATION		
I certify that to the best of my knowledge the for conditions at the time of sample collection. The using EPA Methods 1669 (clean sampling) and instructions from the DEP.			
By:	Date:		
Title:			

# PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

#### AND

#### MAINE WASTE DISCHARGE LICENSE

#### FACT SHEET

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

PERMIT NUMBER:	ME0101664
LICENSE NUMBER:	W002573-6B-H-R

PUBLIC NOTICE DATE: December 27, 2018 – February 1, 2019

NAME AND ADDRESS OF APPLICANT:

**Bayville Village Corporation** 27 Sea St Boothbay Harbor, Maine 04538

COUNTY: Lincoln County

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Bayville Village Corporation 10 Briggs Lane Boothbay Harbor, Maine 04538

RECEIVING WATER Linekin Bay

CLASSIFICATION: Class SB

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Mr. Chris Higgins Contract Operator (207) 633-4663

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# **1. APPLICATION SUMMARY**

# a. Application

The Bayville Village Corporation (BVC) has applied for renewal of its combined Section 301(h) Modified National Pollutant Discharge Elimination System (NPDES) permit #ME0101664 and Maine Waste Discharge License (WDL) #W002573-5L-E-R, which was issued on September 16, 2008 and expired on September 16, 2013. The permit/license (permit hereinafter) approved the discharge of 15,000 gallons per day (gpd) of primary treated sanitary wastewater to Linekin Bay, Class SB, in Boothbay Harbor, Maine. The location of the outfall is shown on Figure 1.



Figure 1 – Outfall Location Map

b. Source Description

The BVC sewer system serves a small seasonal residential community of 25 houses. The facility does not receive any flow from industrial sources. The properties are subject to seasonal water availability<sup>1</sup>. The public water supply is available from May first though the third Thursday in

<sup>&</sup>lt;sup>1</sup>301(h)-Modified NPDES Permit Reissuance Questionnaire for Small Discharge in Maine, May 27, 2014.

October of each year. Half of the gravity collection system flows to a pump station and then to the treatment plant. The other half of the collection system flows by gravity directly to the treatment plant. The two waste streams are blended at the treatment plant. The collection system has no stormwater contribution and only minimal infiltration/inflow (I/I).

# c. <u>Waste Water Treatment</u>

The BVC waste water treatment facility provides a primary level of treatment via a series of septic tanks, and disinfection via chlorination and dechlorination prior to discharge. Sanitary wastewater from twelve (12) residences flows by gravity to a 3,500-gallon septic tank which in turn is pumped to the first of two 6,000-gallon tanks set up in series. Thirteen (13) additional residences are tied into the first 6,000-gallon tank and then the combined waste streams are conveyed to the second 6,000-gallon tank for additional settling. The waste waters are disinfected in a chlorine contact tank using a flow based chemical feed of sodium hypochlorite. Sodium bisulfite is used to dechlorinate the effluent prior to discharge to Linekin Bay. See Appendix A of this Fact Sheet for a schematic of the waste water treatment facility.

Discharge is through a polyvinylchloride (PVC) outfall pipe measuring four inches in diameter that extends out into the receiving water approximately 470 feet shore into Linekin Bay<sup>2</sup>. The existing outfall pipe was extended January of 2013<sup>3</sup>. The outfall is now submerged in 21-feet of water at mean low tide with currents tidal ranges of 8 to 11 feet.

# 2. PERMIT SUMMARY

# a. <u>Regulatory</u>

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

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

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

<sup>&</sup>lt;sup>2</sup> Email from Chris Higgins, Contract Operator, dated July 6, 2018, Titled Outfall Location

<sup>&</sup>lt;sup>3</sup> 301(h)-Modified NPDES Permit Reissuance Questionnaire for Small Discharge in Maine, May 27, 2014.

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

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

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

b. <u>History</u>

*December 27, 1978* – The Department issued WDL #2573 to the BVC for a five-year term. The WDL conditionally authorized the discharge of untreated sanitary waste waters to the tidewaters of Boothbay Harbor.

*December 20, 1982* – The BVC submitted an application to the EPA seeking a variance from secondary treatment requirements (primary treatment only) of the Clean Water Act pursuant to Section 301(h) of said Act.

*August 24, 1983* – The Department issued a five-year renewal of WDL #2573 which authorized the continued discharge of untreated sanitary waste waters to the tidewaters of Boothbay Harbor.

December 4, 1985 – The EPA approved the request for a variance from secondary treatment requirements for the discharge pursuant to Section 301(h) of the CWA.

*March 28, 1986* – The EPA issued NPDES permit #ME0101664 for a five-year term. The permit authorized the discharge of untreated sanitary waste waters with a deadline of July 1, 1988 to construct a primary waste water treatment facility.

*November 4, 1991* – The Department issued WDL #W002573-58-A-R for five-year term. The WDL contained effluent limitations consistent with primary treatment of sanitary waste water and consistent with those established in the 3/28/86 NPDES permit.

January 26, 1996 - The Department issued a renewal of WDL #W002573-59-B-R for a five-year term.

*January 12, 2001* – The Department received authorization from the EPA to administer the NPDES program in Maine, however, the authority to grant a variance from secondary treatment requirements pursuant to Section 301(h) of the CWA was not granted to the State of Maine.

*February 28, 2002* – The Department issued a Section 401 Water Quality Certification to EPA indicating that the proposed primary treatment discharge would not cause or contribute to failure of the water body to attain the standards of its assigned classification.

*March 12, 2002* – The Department and EPA issued a combined WDL and NPDES permit (#W002573-5L-C-R and ME0101664) authorizing the discharge of primary treated waste water from the BVC facility.

*December 1, 2006* – The BVC submitted an application to the Department and EPA for renewal of the March 12, 2002 license/permit. The Department accepted the application for processing on December 4, 2006.

September 24, 2007–Joint EPA/Department Permit, Fact Sheet and Tentative 301(h) decision Document public noticed.

*March 12, 2008* – Concurrence letter from National Marine Fisheries Service with EPA's "not likely to affect Endangered Species Act listed species or critical habitat" determination.

September 16, 2008 – The Department and EPA issued a combined WDL and NPDES permit (#W002573-5L-E-R and ME0101664) authorizing the discharge of primary treated waste water from the BVC facility.

January 2013 – Outfall extended 160 feet further into Linekin Bay.

September 16, 2013 – Permit expires and is administratively continued.

*October 9, 2013* – Bayville Village Corporation submits a current 301(h) Waiver Reapplication to EPA.

# **3. CONDITIONS OF PERMITS**

Maine law, 38 M.R.S. Section 414 A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S. § 420 and Department rule 06-096 CMR Ch. 530,

Surface Water Toxics Control Program, require the regulation of toxic substances not to exceed levels set forth in 06-096 CMR Ch. 584, *Surface Water Quality Criteria for Toxic Pollutants*, and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

Maine law, 38 M.R.S. § 469 classifies the receiving water at the point of discharge as Class SB water. Maine water quality standards at 38 M.R.S. § 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 C.F.R. § 125, Subpart G, more specifically § 125.57(a)(2), states that discharge of pollutants in accordance with such modified requirements [301(h)] will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife, and allows recreational activities in and on the water.

#### 4. RECEIVING WATER QUALITY CONDITIONS

Linekin Bay at the point of discharge is a marine water subject to tidal action with a difference in tides (mean high to mean low) of up to 11 feet<sup>4</sup> with very strong currents. Maine law, 38 M.R.S. § 469 classifies the receiving waters at the point of discharge as Class SB waters. Maine law, 38 M.R.S. § 465-B(2) contains the classification standards for Class SB waters. Designated uses for Class SB waters are: "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." (*see* 38 M.R.S. § 465-B(2)(A))

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 2016 Integrated Water Quality Monitoring and Assessment Report, pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the receiving water as "Estuarine and Marine Waters Impaired for Bacteria Only – TMDL Required"<sup>5</sup>.

a. Shellfishing

<sup>&</sup>lt;sup>4</sup> <u>https://tidesandcurrents.noaa.gov/stationhome.html?id</u>

<sup>&</sup>lt;sup>5</sup> Maine DEP 2016 Integrated Report Appendices, Page 181, Area 730 Boothbay and vicinity, (Southport, Boothbay Harbor, Boothbay) Class SB. Current Elevated fecal indicators Shellfishing Prohibited.

Bayville Village's waste water treatment facility discharges to a shellfish harvesting area that the Maine Department of Marine Resources (DMR) has designated as "Pollution Area 22, Booth Bay and vicinity (Southport, Boothbay Harbor, Boothbay)" and is closed to shellfishing as of March 31, 2008. <sup>6</sup>. Figure 2 shows the location of Pollution Area 22.

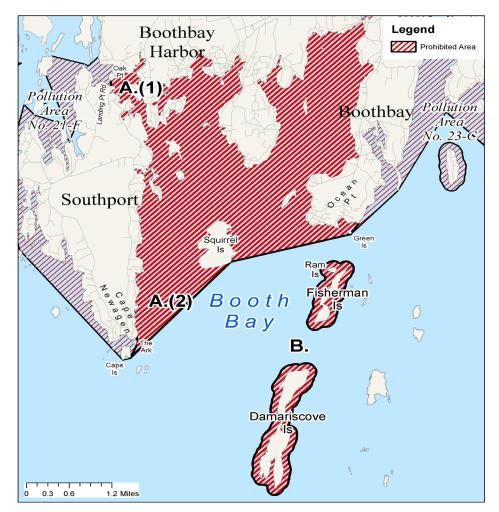


Figure 2 – Maine Department of Marine Resources Pollution Area 22.

MEDRM 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 Bayville Village facility will not cause or contribute to the closure of the shellfish harvesting area.

b. Biological Monitoring

<sup>&</sup>lt;sup>6</sup> <u>http://www.maine.gov/dmr/shellfish-sanitation-management/closures/pollution.html</u>

In accordance with federal regulation, municipalities with CWA Section 301(h) waivers from secondary treatment "must have a monitoring program that is designed to provide data to evaluate the impact of the modified discharge on the marine biota, demonstrate compliance with applicable water quality standards or water quality criteria, as applicable, and measure toxic substances in the discharge" (*see* 40 C.F.R. § 125.63(a)(1)(i)). The first round of Maine 301(h) waiver permits<sup>7</sup> included requirements for sediment monitoring and benthic surveys to be conducted by SCUBA divers. To alleviate the cost of each waiver applicant conducting their own SCUBA surveys, MEDEP agreed to conduct the SCUBA surveys on behalf of the applicants. Between 1987 and 1994 four surveys were conducted by MEDEP biologist/SCUBA divers.

The results of the "field surveys and sampling of several facilities demonstrate that there is no impact, nor is any impact likely, from the discharge of primary treated waste water from the 301 (h) participating facilities.<sup>8</sup>" The biologists found no solids deposition within the outfall zone of initial dilution (ZID) or the control sites. They found no discernable difference between bottom dwelling organisms, flora and fauna within the ZID and again at control sites. The biologist found the same to be true in each of the four facilities surveyed. The divers also observed that, due to its relatively low density, the effluent rose toward the surface of the ocean and was quickly dispersed by longshore currents.

However, after surveying the sites of four facility outfalls, by letter dated February 17, 1995 from the EPA Regional Administrator, the EPA agreed with the MDEP that further SCUBA inspections of 301(h) outfalls was too dangerous due to the swift currents generally found in these receiving waters. David Courtemanch, the MEDEP Senior Biologist and diver with the most experience in potential impact of the 301(h) facilities in Maine concluded that "any monitoring beyond effluent sampling is useless, wasteful, and of no environmental benefit.<sup>9</sup> He also noted that strong currents and tides around each of the outfall presented technical difficulties and risks to divers that could not be justified in future field surveys.

A recent study of 40 marine outfalls published in the Marine Pollution Bulletin Journal<sup>10</sup> found that the "main physical processes that govern the mixing and evolution of wastewater in the ocean are turbulent dispersion, transport (advection and diffusion) and resuspension ... In high energy environments all constituents will be broadly dispersed with a minor chance of concentrating." The study demonstrated where significant currents and wave action were present, there was almost no degradation to the marine environment from small municipal dischargers.

EPA and MEDEP agree that effluent limits and monitoring requirements are sufficiently protective of the aquatic environment at the point of discharge so as not to require additional

<sup>&</sup>lt;sup>7</sup> The 14 Maine 301(h) waivers were granted in the 1980s except for Stonington which was granted in 1994. Six of the 14 municipalities no longer have 301(h) waivers, having upgraded to secondary treatment or ceased discharging to surface waters.

<sup>&</sup>lt;sup>8</sup> Transmittal letter to David Fierra, Director, Water Management Division US EPA, New England from Martha Kirkpatrick, MEDEP Director Bureau of Land and Water Quality dated October 28. 1994 for the: MEDEP 301(h) Facilities in Maine, Determining the Necessary Scope of Study for Assurance of Environmental Protection.
<sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> Marine Pollution Bulletin Journal (101(2015)174–181): <u>Response of benthos to ocean outfall discharges: does a</u> general pattern exist? A. Puente, R.J. Diaz: <u>www.elsevier.com/locate/marpolbul</u>

biological monitoring. This decision is consistent with 40 CFR §125.63(a)(1)(i)(B) which states that the monitoring requirements are "limited to include only those scientific investigations necessary to study the effects of the proposed discharge" and 40 CFR §125.63(b)(1) which specifies that monitoring is required to the extent practicable.

#### 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, TSS and pH.

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

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

EPA issued a 301(h) waiver to BVC on December 4, 1985, based upon the following findings:

- That the discharge will comply with the State of Maine water quality standards for dissolved oxygen and suspended solids.
- That the proposed discharge will not adversely impact public water supplies or interfere with the protection and propagation of a balanced indigenous population of marine life and will allow for recreational activities.
- That no industrial wastes are discharged into the collection system.
- 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 C.F.R. § 125.57(a)(3), states that the applicant must establish a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable, and the scope of such monitoring is 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 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 Bayville Village Corporation permit, to carry forward the original 301(h) waiver decision.

#### 6. ENDANGERED SPECIES ACT

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

Section 7(a)(2) of the ESA requires every Federal agency, in consultation with and with the assurance of the Secretary of Interior, to ensure that any action it authorizes, funds or carries out, in the United States or upon the high seas, is not likely to likely to adversely affect the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for freshwater species. The National Marine Fisheries Service (NMFS) administers Section 7 consultations for marine and anadromous species.

The Federal action being considered in this case is EPA's reissuance of the NPDES Permit and Waiver from Secondary Treatment for the Facility. As the federal agency charged with authorizing the discharge from this Facility, EPA initiated consultation under § 7(a)(2) of the ESA with the February 16, 2016 meeting with NMFS.<sup>11</sup> Following the meeting, EPA sent a detailed letter with supporting materials to NMFS concerning all eight municipal permits with waivers (301(h)) from secondary treatment in Maine. The letter requested that NMFS concur with EPA that reissuing NPDES permits for the 8 facilities is not likely to adversely affect the continued existence of any listed species or result in the destruction or adverse modification of critical habitat.<sup>12</sup> NMFS concurred with EPA's finding by letter April 12, 2017. The letter said in part:

We have completed our consultation under section 7 of the Endangered Species act (ESA) in response to your letter received April 5, 2017. We reviewed your consultation request document and related materials. Based on our knowledge, expertise, and your materials, we concur with your conclusions that the proposed action is not likely to adversely affect the NMFS ESA-listed species and/or designated critical habitat. We also concur with your analysis and conclusion provided in your correspondence that the proposed action will not result in the destruction or adverse modification of the proposed critical habitat, and conference is not necessary. Therefore, no further consultation pursuant to section 7 of the ESA is required.<sup>13</sup>

As of the development of this Fact Sheet, EPA has obtained no new information that would change the basis of EPA's April 5, 2017, determination that the proposed action will not result in the destruction or adverse modification of the proposed critical habitat.

<sup>&</sup>lt;sup>11</sup> February 16, 2016 Meeting with Christine Vaccaro, Section 7 Fisheries Biologist of the NOAA Protected Resources Division, Phil Colarusso and Doug Corb EPA, RI and Mark Johnson, Marine Habitat Resource Specialist at the NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) in Gloucester, MA.

<sup>&</sup>lt;sup>12</sup> April 5, 2017 letter to Kimberly Damon-Randall, Assistant Regional Administrator for NMFS Protected Species, from Ellen Weitzler P. E., Chief, Municipal Permits Branch EPA Region 1.

<sup>&</sup>lt;sup>13</sup> April 12, 2017 letter from Kimberly Damon-Randall, Assistant Regional Administrator for NMFS Protected Species, to Ellen Weitzler P. E., Chief, Municipal Permits Branch EPA Region 1.

#### 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. <u>Description of Proposed Actions</u>

This proposed action is the reissuance of existing NPDES permit and accompanying Clean Water Act Section 301(h) waiver authorizing the discharge of primary treated waste water to the marine receiving waters.

EPA met with Mark Johnson, Marine Habitat Resource Specialist, with the National Marine Fisheries Service, Northeast Regional Office in Gloucester Mass concerning the permitted discharge to Essential Fish Habitat. The meeting was held concurrently with the ESA Section 7 consultation mentioned in the previous section of this Fact Sheet.<sup>14</sup> The initial meeting was followed by a letter from EPA to Louis A. Chiarella, Assistant Regional Administrator, Habitat Conservation Division, NMFS.<sup>15</sup> The letter stated in part:

EPA believes that the conditions and limitations contained within the proposed permit adequately protect all aquatic life, including those with designated EFH in the receiving water, and that further mitigation is not warranted. If adverse impacts to EFH are detected because of this permit action, or if new information is received that changes the basis for these conclusions, EPA will contact NMFS Habitat Division.

As of the development of this Fact Sheet, EPA has obtained no new information that would change the basis of EPA's June 29, 2017, determination that further mitigation is not warranted. NMFS will receive the Draft Permit, (this) Fact Sheet, and the Tentative Waiver Decision Document during the 30-day public notice comment period. NMFS may revisit EFH consultation based on these documents or new information, if warranted.

<sup>&</sup>lt;sup>14</sup> February 16, 2016 Meeting with Christine Vaccaro, Section 7 Fisheries Biologist of the NOAA Protected Resources Division, Phil Colarusso and Doug Corb EPA, RI and Mark Johnson, Marine Habitat Resource Specialist at the NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) in Gloucester, MA.

<sup>&</sup>lt;sup>15</sup> Letter from Doug Corb, EPA Region 1 Municipal Permits Branch to Louis A. Chiarella, Assistant Regional Administrator, Habitat Conservation Division, NMFS., Dated June 29, 2017.

The species listed in the table below are believed to be the only managed species present during one or more life stages within the area which encompasses the discharge site. No "habitat area of particular concern." as defined under § 600.815(a)(9) of the Magnuson-Stevens Act, has been designated for this site.

The discharge location (N 43° 51' 27.70" N, W 69° 36' 9.83" W) falls within the EFH designation for the following 10-minute square shown in Table 1:

Boundary	Boundary North E		South	V	West		
Coordinates	44° 00.0 N	69° 30.0 W	43° 50	0.0 N 6	69° 40.0 W		
Species	1	Eggs	Larvae	Juveniles	Adults		
Atlantic salmon	(Salmo salar)			X	X		
Atlantic cod (G	adus morhua)			X	X		
pollock (Pollaci	hius virens)			X	X		
whiting (Merluc	ccius bilinearis)			X	X		
red hake (Uroph	hycis chuss)		X	X	X		
white hake (Ura	ophycis tenuis)			X	X		
winter flounder <i>americanus</i> )	(Pseudopleuronectes	X	X	Х	X		
/	der <i>(Limanda ferrugi</i>	inea) X	Х	X	X		
windowpane flo aquosus)	ounder (Scophthalmus	x X	X	X	X		
	e (Hippoglossoides	Х	Х	Х	Х		
1 /	crozoarces american	us) X	Х	Х	Х		
Atlantic halibut <i>hippoglossus)</i>	(Hippoglossus	X	X	X	X		
	llop (Placopecten	Х	Х	Х	Х		
	ring (Clupea harengu	is)		Х	Х		
bluefish (Pomat	tomus saltatrix)			X	X		

#### Table 1 – EFH Designations

Atlantic mackerel (Scomber scombrus)		Х	Х
bluefin tuna (Thunnus thynnus)			Х

#### 8. EFFLUENT LIMITATIONS

#### a. Effluent Flow

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

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

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

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

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

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

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

The limitation on sewage effluent flow is within EPA's authority to condition a permit in order to carry out the objectives of the Act. See CWA §§ 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.

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 2008 permit established a monthly average flow limitation of 0.015 million gallons per day (MGD). The limitation is being carried forward in this permitting action but is being expressed as 15,000 gallons per day (gpd) rather than MGD. The limit was originally established by the EPA on December 4, 1985 when the waiver was granted. Effluent flows for the last 5 years are summarized below, or can be seen in more detail in Appendix B.

 $\begin{array}{l} \text{Minimum (MGD)} - 0.0\\ \text{Maximum (MGD)} - 0.007\\ \text{Average (MGD)} - 0.001 \end{array}$ 

The limitation is being carried forward in this permitting action but is being expressed as 15,000 gallons per day (gpd) rather than MGD.

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.

MDEP Modeling<sup>16</sup> has determined that at the full permitted flow of 15,000 gpd, the discharge from the BVC waste water treatment facility will be diluted by the following factors:

Acute = 271:1 Chronic = 1,321:1 Harmonic Mean = 3,963:1

#### c. <u>Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS)</u>

Federal regulations state that primary or equivalent treatment means treatment by screening, sedimentation, and skimming adequate to remove at least thirty percent (30%) of the BOD and 30% of the TSS material in the treatment works influent (40 C.F.R. §125.58(r)). The Department considers a thirty percent (30%) removal of BOD and a fifty percent (50%) removal of TSS from the influent loading as a best professional judgment (BPJ) determination of best practicable treatment (BPT) for primary facilities.

The 2008 Permit included requirements for 30% BOD removal and 50% TSS removal as well as calculated mass and concentration limits for BOD and TSS. The limitations were calculated based on an assumed influent concentration of 290 mg/L for each parameter and a 30% removal for BOD and a 50% removal for TSS. The effluent limits from the 2008 Permit and the effluent data for 2013 to 2018 are provided in Appendix B. As can be seen from the data, the facility has met its BOD and TSS effluent limits consistently.

The percent removal requirements were established in the 2008 Permit and are being carried forward. Percent removal is calculated as follows:

Percent removal = ((ave monthly influent concentration) - (ave monthly effluent concentration)) X 100 100

The 2008 permit established monthly average technology based mass and concentration limits for BOD and TSS with a monitoring frequency of 1/month. The limitations were calculated based on an assumed influent concentration of 290 mg/L for each parameter and the required 30% removal for BOD and a 50% removal for TSS. EPA established an assumed monthly average influent concentration of 290 mg/l for BOD and TSS based on the EPA Design Manual, Onsite Wastewater Treatment and Disposal Systems table entitled "Characteristics of Typical Residential Wastewater" high range of values for BOD<sub>5</sub> and TSS<sup>17</sup>.

<sup>&</sup>lt;sup>16</sup> Bayville Outfall Extension email from Peter Newkirk (MDEP) to Gregg Wood (MDEP), 2/24/2012

<sup>&</sup>lt;sup>17</sup> Design Manual Onsite Wastewater Treatment and Disposal Systems, EPA Office of Water Program Operations, October 1980, EPA 625/1-80-012, Table 4-3, Page 56.

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

#### Flow limitation of 15,000 gpd (0.015 MGD)

BOD:	290  mg/L - [(290  mg/L)(0.30)] = 203  mg/L $(203  mg/L)(8.34)(0.015  MGD) = 25  lbs/day$
TSS:	290 mg/L – [(290 mg/L)(0.50)] = 145 mg/L (145 mg/L)(8.34)(0.015 MGD) = 18 lbs/day

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

d. <u>Settleable solids</u>

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 during the disinfection season.

The 2008 Permit established 1/month monitoring frequency. The monitoring frequency is retained in the draft permit. A review of the DMR data for the period August 2013 – September 2018 indicates a mean settleable solids value of 0.3 ml/L.

The Draft Permit continues the requirement to report settleable solids with the same once per week monitoring frequency.

e. Enterococci bacteria and fecal coliform bacteria

Specific types of non-pathogenic bacteria are used as indicator organisms, or surrogates, for waterborne pathogens (bacteria, viruses, etc.) which enter surface waters from a variety of sources, including human sewage and the feces of warm-blooded wildlife. These pathogens can pose a risk to human health due to gastrointestinal illness through different exposure routes, including contact with and ingestion of recreational waters, ingestion of drinking water, and consumption of shellfish.<sup>18</sup>

#### Enterococci

<sup>&</sup>lt;sup>18</sup> Maine Statewide Bacteria TMDL (Total Maximum Daily Loads) August 2009 Report # DEPLW-1002

Maine water quality standards use enterococci as indicator organisms for protection of estuarine and marine recreational waters (38 M.R.S. § 465). Because contact recreation occurs largely in the summer months, the enterococci criteria are applied seasonally between April 15<sup>th</sup> and October 31<sup>st</sup> each year. The 2008 permit did not include 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 colony forming units per 100 milliliters (cfu/100 ml) and a maximum daily limit of 54 cfu/100 ml. The monitoring frequency shall be twice per month.

#### Fecal Coliform

Maine water quality standards apply, by reference, the numeric criteria recommended by the National Shellfish Sanitation Program, Unites States Food and Drug Administration (see 38 M.R.S. § 465-B(2.A). Unlike the bacteria criteria to protect recreational uses which are applicable seasonally, Maine's coliform criteria to protect shellfishing uses apply year round. Bacteria are limited in the 2008 Permit to average and daily maximum concentration limits of 15 cfu/100 ml and 50 cfu/100 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 2008 Permit applied the fecal coliform limits seasonally (May 15 – September 30). As can be seen from the summary in Table 2, Bayville Village met the fecal coliform limits were exceeded. A full monthly monitoring data set for 2013 to 2018 is provided in Appendix B.

	Monthly Ave (cfu/100 ml)	Daily Max (cfu/100 ml)
Effluent Limit	15	50
Minimum	10	10
Maximum	3.16	2689
Average	10.2	121.8

Table 2 - Summary of Effluent Fecal ColiformData (2013-2018)

The Maine Department of Marine Resources (MEDRM) regulates shellfishing within the state. MEDRM sets shellfish closure areas around all outfalls discharging sanitary wastewater in order to protect shellfish beds in case of failure of disinfection systems. Even with the outfall closure areas, the permit limits must still protect the designated uses<sup>19</sup> of class SB waters, which include *harvesting of shellfish*<sup>20</sup>. The MEDRM Closure Order Number 22 found on page 7 of the Fact Sheet does not remove the designated use of *harvesting of shellfish*, nor EPA's responsibility to set fecal coliform limits in the draft permit to protect that use.

<sup>&</sup>lt;sup>19</sup> 40 C.F.R. § 131.3(f) Designated uses are those uses specified in water quality standards for each water body or segment whether or not they are being attained.

<sup>&</sup>lt;sup>20</sup> 38 M.R.S. § 465-B(2). Standards for classification of estuarine and marine waters-Class SB waters

The Food and Drug Administration (FDA) periodically updates the shellfish standards. The most recent revision is the 2013 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 MEDRM in the protection shellfish resources<sup>21</sup> 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<sup>22</sup> (mTEC) of: 31 CFU per 100 ml for a MF [membrane filter] (mTEC) test.

The Draft Permit includes limits of 14 cfu/100 ml and 31 cfu/100 ml, consistent with the recommendations in the 2013 National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish. The monitoring frequency requirement of twice per month is based on DEP guidance for POTWs and is applicable year round, consistent with Maine's water quality standards. The permittee may continue to use the Standard Method 9222-D-1997-Thermotolerant (Fecal) Coliform Membrane Filter Procedure which is the closest method to that used by MEDRM that is approved for wastewater under 40 C.F.R. §136.

#### f. Total residual chlorine (TRC)

Chlorine compounds resulting from the disinfection process can be extremely toxic to aquatic life. The instream chlorine criteria are defined in National Recommended Water Quality Criteria: 2002, EPA 822R-02-047 (November 2002), as adopted by the Maine DEP into the 06-096 CMR Ch. 584: Surface Water Quality Criteria for Toxic Pollutants<sup>23</sup>. The criteria establish that the total residual chlorine in the receiving water should not exceed 7.5 ug/l (chronic) and 13 ug/l (acute). Maine also applies a technology-based best practicable treatment (BPT) limit of 1.0 mg/L.

The 2008 permitting action established a technology based daily maximum limitation of 1.0 mg/L, with monitoring frequency of three times per week. A review of effluent monitoring data from 2013 through 2018 demonstrates that BVC has met the daily maximum 1.0 mg/L TRC limit. Results from that 5+ year period of monitoring are shown below:

Daily Maximum Values (mg/L)	Average (mg/L)
0.05 - 0.82	0.52

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

<sup>23</sup> 06-096 CMR Ch. 584, Surface Water Quality Criteria for Toxic Pollutants <u>http://maine.gov/dep/water/rules/index.html</u>

<sup>&</sup>lt;sup>21</sup> 2013 National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish 2013 Revision section 02.

 $<sup>^{22}</sup>$  A membrane filtration test method using Modified membrane-Thermotolerant Escherichia coli or mTEC agar or medium.

Parameter	Acute	Chronic	Acute	Chronic	Acute	Chronic
	Criteria	Criteria	Dilution	Dilution	Limit	Limit
Chlorine	13 ug/L	7.5 ug/L	271:1	1321:1	3.5 mg/L	17.2 mg/L

Example calculation:Acute0.013 mg/L (271) = 3.5 mg/LChronic0.0075 mg/L (1321) = 17.2 mg/L

To limit the toxic effects of chlorine compounds, permits issued with MEDEP impose the more stringent of the calculated water quality based or BPT based limits. The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine, or chlorine based compounds, unless the calculated acute water quality based threshold is lower than 1.0 mg/L.

The 1.0 mg/L maximum daily limit is carried forward during this permit reissuance to be consistent with Maine CWA Section 401 permit certification requirements. The monitoring frequency remains three times per week.

#### g. <u>pH</u>

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

The 2008 Permit established a BPT pH range limit of 6.0 to 9.0 standard units pursuant to MEDEP Rule Ch. 525(3)(III)(c), along with a monitoring frequency of 1 per week. A review of the DMR data for the period 2013 to 2018 indicates that the pH of the effluent ranged from 6.4 to 6.8 standard units, well within the effluent limits. A full monthly monitoring data set for 2013 to 2018 is provided in Appendix B.

The Draft Permit proposes to continue the pH limits from the 2004 Permit (6.0 to 9.0 standard units), consistent with the secondary treatment standards for pH found in 40 C.F.R. §133.102(c) and consistent with the BPT approach Maine regulations.

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

Maine law, 38 M.R.S., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Ch. 530, *Surface Water Toxics Control Program*, and Ch. 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 06-096 CMR Ch. 530, the Department has made the determination the BVC facility is not a new discharge nor has it substantially changed since issuance of the previous permit/license.

Therefore, the BVC qualifies for the waiver from the 06-096 CMR Ch. 530 testing requirements. 06-096 CMR Ch. 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.

Special Condition J, 06-096 CMR Ch. 530(D)(2)(4) Statement For Reduced/Waived Toxics Testing, of this permitting action requires the permittee to file an annual certification with the Department. The certification form is provided in Appendix C.

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 M, *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 06-096 CMR Ch. 530(3)(c).

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

i. <u>Mercury</u>

On May 23, 2000, pursuant to Certain deposits and discharges prohibited, 38 M.R.S. § 420 and Waste discharge licenses, 38 M.R.S. § 413 and Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 CMR 519 (last amended October 6, 2001), the MEDEP issued a Notice of Interim Limits for the Discharge of Mercury to the permittee, administratively modifying WDL #W002650 by establishing interim average and maximum effluent concentration limits of 46.1 nanograms per liter (ng/L) and 69.2 ng/L, respectively, and a minimum monitoring frequency requirement of one (1) test per year for mercury. A review of the MEDEP's data base for the period September 1999 to September 2018 indicates mercury test results have ranged from 1.00 ng/L to 41.00 ng/L with an arithmetic mean (n=22) of 18.04 ng/L.

As discussed in Section 2.a of this Fact Sheet, if the State believes that any conditions more stringent than those contained in the Draft Permit are necessary to meet the requirements of either the CWA §§ 208(e), 301, 302, 303, 306 and 307 or the appropriate requirements of State law, the State should include such conditions and, in each case, cite the CWA or State law reference upon which that condition is based. In this case, Maine's CWA 401 certification is expected to include the interim limits for the discharge of mercury that are already incorporated in the Facility's Maine Discharge License, but which have not previously been incorporated into

its NPDES Permit, on the basis that such limits are required in accordance with 38 M.R.S. 420(1-B)(B)(1). The interim mercury limitations have been incorporated into Part I.B of the Draft Permit.

#### 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**

Domestic septage is the liquid or solid material removed from a septic tank cesspool, portable toilet, type II marine sanitation device, or similar system that receives only domestic septage (household, non-commercial, non-industrial sewage).

Maine regulates septage/sludge under 06-096 CMR Ch. 400 et seq. Domestic septage is regulated under Federal requirements found at 40 C.F.R. 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 septage.

Septage is removed from the treatment train once per year by a licensed hauler. It is taken to the Boothbay Harbor Sewer District, Publicly Owned Treatment Works (ME0100064) where the septage is blended into the plant influent. Each year as part of system maintenance for Bayville, all the septic tanks, pump station wet well, and treatment plant disinfection chamber are pumped, cleaned, and inspected. The wet well amount is minimal, <50 gallons, as this tank is pumped down first then accumulated sludge removed. The disinfection chamber would be the same idea. However, this chamber is slightly larger and contains less than <150 gallons. There are three septic tanks that are pumped dry. The first is a 3,500 gallon tank prior to the pump station. The next two tanks are 6,000 gallons each and are in series prior to the disinfection chamber. The first tank in series, captures 90-98% of the solids. The second tank is mostly effluent water with very little solids from the first tank. The tank contents are transported to the Boothbay Harbor Sewer District for treatment over a two-day period<sup>24</sup>.

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.

The permittee is required to annually report to EPA the quantity and ultimate disposition septage removed from the treatment system consistent with CWA 503 regulations.

#### 11. OPERATIONS AND MAINTENANCE FOR THE TREATMENT PLANT

<sup>&</sup>lt;sup>24</sup> Email from Chris Higgins, Contract Operator, dated March 12, 2018, Titled: NPDES Wastewater Discharge Permit Reissuance Question

The permit standard conditions for "Proper Operation and Maintenance" are found at 40 C.F.R. § 122.41(e). These require proper operation and maintenance of permitted wastewater systems and related facilities to achieve permit conditions. Similarly, the permittee has a "duty to mitigate" as required by 40 C.F.R. § 122.41(d). This requires the permittee to take all reasonable steps to minimize or prevent any discharge in violation of the permit which has the reasonable likelihood of adversely affecting human health or the environment. EPA maintains that these programs are an integral component of ensuring permit compliance under both these provisions.

The draft permit includes requirements for the permittee to control infiltration and inflow (I/I). Infiltration is groundwater that enters the collection system through physical defects such as cracked pipes, or deteriorated joints. Inflow is extraneous flow entering the collection system through point sources such as roof leaders, yard and area drains, sump pumps, manhole covers, tide gates, and cross connections from storm water systems.

40 C.F.R. § 125.60(c)(iii) addresses I/I in a conventional primary treatment process. It recognizes that significant I/I prior to treatment can hinder the POTW's ability to meet the percent removal limits and allows for their adjustment provided the I/I is deemed nonexcessive.<sup>25</sup>

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

#### **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 Boothbay Register on or about April 4, 2013, consistent with Maine application requirements.

The draft permit public notice will be placed on the EPA Region 1 NPDES website at: <u>https://www.epa.gov/npdes-permits/maine-npdes-permits</u>.

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 14 below, and to the Department at the address shown in Section 14 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 days public notice whenever the Regional Administrator finds that response to this notice indicates a significant public interest. In reaching

<sup>&</sup>lt;sup>25</sup> Nonexcessive (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day. 40 C.F.R. §125.60(c)(iii)

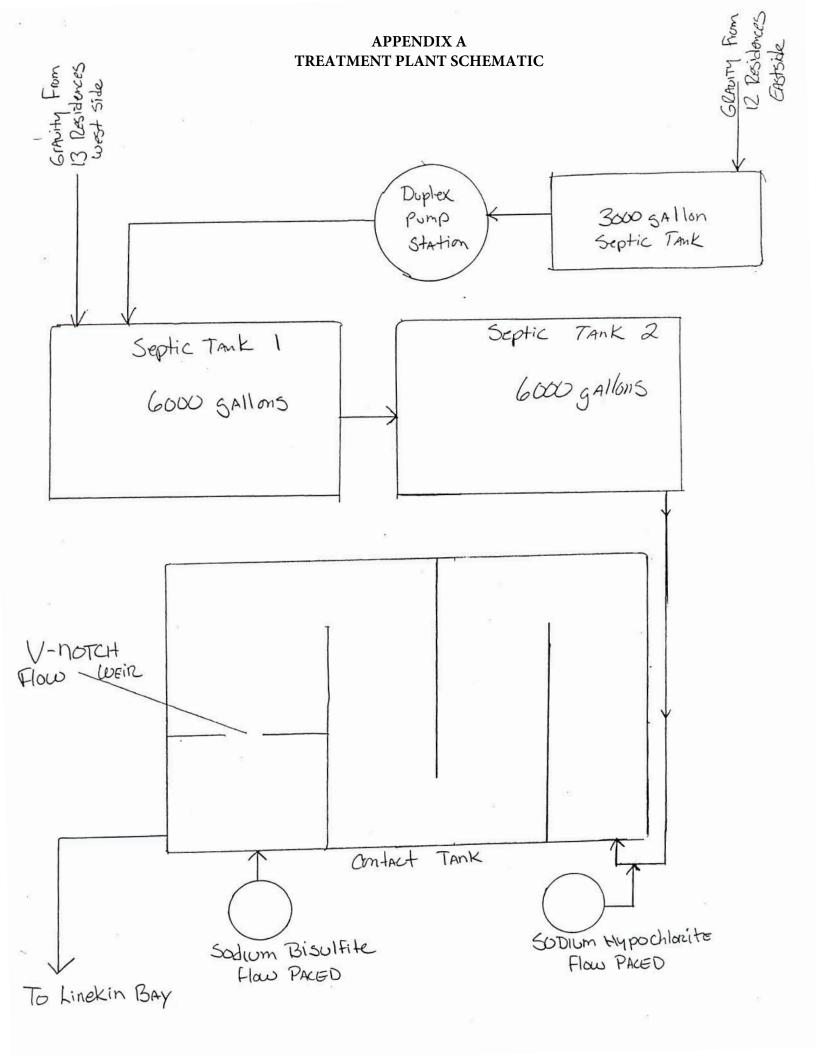
a final decision on the draft permit, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

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 Water Quality Division of Water Quality Management State House Station #17 Augusta, ME. 04333-0017 Phone: 207-287-7693 Email: gregg.wood@maine.gov Doug MacLean U.S. Environmental Protection Agency Mail Code – OEP06-4 5 Post Office Square – Suite 100 Boston, MA 02109-3912 Phone: 617-918-1608 Email: maclean.douglas@epa.gov



#### APPENDIX B DISCHARGE MONITORING REPORT SUMMARY

	Flow	BOD₅	BOD₅	BOD₅	BOD₅	TSS	TSS	TSS	TSS	BOD₅	TSS	Settleable Solids	Settleable Solids	рН	рН	Fecal Coliform	Fecal Coliform	Total Residual Chlorine
Monitoring Period End Date:	Monthly Average (MGD)	Monthly Ave (lb/day)	Monthly Ave (mg/L)	Daily Max (Ib/day)	Daily Max (mg/L)	Monthly Ave (mg/L)	Monthly Ave (Ib/day)	Daily Max (Ib/day)	Daily Max (mg/L)	% Removal	% Removal	Daily Max (ml/L)	Monthly Ave (ml/L)	Minimum (SU)	Maximum (SU)	Monthly Ave (#/100 ml)	Daily Max (#/100 ml)	Daily Max (mg/L)
Effluent Limit	0.015	-		Report	Report	145		Report	Report	≥ 30% Removal	≥ 50% Removal	Report	Report	6	-	-		-
Minimum	0.000	0.3						0.1	8		-		0					
Maximum	0.007	9.8		22		-	-		55	0	0		0	÷	6.8		2689	
Average	0.001	2.9										0.30		6.5			121.83	
08/31/2013	0.004	6		5.6					49			0.3		6.6	6.7	10		
09/30/2013	0.005	4		3.5					35			0.3		6.7	6.7	10	10	0.30
10/31/2013	0.002	3	74	2.9	74				22			0.3		6.5	6.8			
11/30/2013	0.000					44												
12/31/2013	0.000					37												
01/31/2014	0.000					37												
02/28/2014	0.000					45												
03/31/2014	0.000					45												
04/30/2014	0.001	0	74	0.3	74	38	19	0.1	16			0.3		6.5	6.6			
05/31/2014	0.002	3	233	5.5	722	52	15	0.2	27			0.3		6.6	6.5	10	10	0.34
06/30/2014	0.004	3	188	2.9	188	55	19	0.7	47			0.3		6.5	6.6	10	10	0.61
07/31/2014	0.005	6	124	6.1	124	47	20	1.7	35			0.3		6.5	6.6	10	10	0.51
08/31/2014	0.005	7	163	7.1	163	54	18	1.3	29			0.3		6.5	6.6	10	10	0.72
09/30/2014	0.002	5	183	4.5	183	52	12	0.7	28			0.3		6.5	6.6	12	15	0.77
10/31/2014	0.001	1	75	0.8	75				22			0.3		6.5	6.6			
11/30/2014	0.000					38	11											
12/31/2014	0.000					30	19											
01/31/2015	0.000					40												
02/28/2015	0.000					46												
03/31/2015	0.000					43	11											
04/30/2015	0.001	0	61	0.3	61	34		0.1	15			0.3		6.5	6.5			
05/31/2015	0.002	3		2.5	111	53			17			0.3		6.5	6.6	10	10	0.48
06/30/2015	0.005	5		4.8					31			0.3		6.5	6.6			
07/31/2015	0.006	10	168	22	363	55			50			0.3		6.4	6.5	10	10	0.51
08/31/2015	0.004	6		5.7	144	62			54			0.3		6.5	6.6	10	10	0.61
09/30/2015	0.002	1			58				14			0.3		6.5	6.8	10		
10/31/2015	0.001	1				-			16			0.3		6.5	6.7			0.11
11/30/2015	0.000	-		0.0		45		-	10		1	0.0		0.0	0.1		1	
12/31/2015	0.000					41												
01/31/2016	0.000					40												
02/29/2016	0.000					40	-											
03/31/2016	0.000					38												
04/30/2016	0.000	1	196	0.6	196	41			10			0.3		6.48	6.53			
05/31/2016	0.001	1		0.8					14		<u> </u>	0.3		6.46	6.57	10	10	0.82
06/30/2016	0.002	1		1	92				41			0.3		6.5	6.6			
07/31/2016	0.007	7	93	6.7	93				47		1	0.3		6.4	6.6	10		
08/31/2016	0.005	3		3					49		1	0.3		6.45	6.53	10		
09/30/2016	0.001	1			74				42		1	0.3		6.44	6.56	10	10	
10/31/2016	0.001	1				-			34		1	0.0		6.41	6.53	10		0.02

#### APPENDIX B DISCHARGE MONITORING REPORT SUMMARY

	Flow	5	BOD₅	BOD₅		TSS		TSS	TSS	BOD₅	TSS	Settleable Solids		рH	pН	Coliform	Fecal Coliform	Total Residual Chlorine
Monitoring Period End	Monthly Average	-	Monthly Ave	Daily Max	Daily Max	Monthly	Monthly Ave	Daily Max	Daily Max	%	%	Daily Max	Monthly	Minimum	Maximum	Monthly	Daily Max	Daily Max
Date:	(MGD)	(lb/day)	(mg/L)	(lb/day)	-	(mg/L)		(lb/day)	-		Removal		Ave (ml/L)	-			(#/100 ml)	
11/30/2016	0.000					49	8											
12/31/2016	0.000					42	9											
01/31/2017	0.000					41	16											
02/28/2017	0.000					41	7											
03/31/2017	0.000					42												
04/30/2017	0.001	0	104	-				-	18			0.3		6.38	6.52			
05/31/2017	0.001	1	138						18			0.3		6.41	6.56		-	
06/30/2017	0.002	1	111		111	59			32			0.3		6.46	6.55	10	-	
07/31/2017	0.003	3	119	-	-	-	-		42			0.3		6.47	6.63	10	-	
08/31/2017	0.003	5	146	-	146	-		-				0.3		6.44	6.57	10	-	
09/30/2017	0.001	1	135		135			0.3	31			0.3		6.41	6.54	10	10	0.51
10/31/2017	0.001	1	100	1	100			0.2	18			0.3		6.45	6.56			
11/30/2017	0.000					45	-											
12/31/2017	0.000					42												
01/31/2018	0.000					39												
02/28/2018	0.000					39												
03/31/2018	0.000					43	-											
04/30/2018	0.002	1	59					-	8			0.3		6.42	6.51			
05/31/2018	0.002	3	130						8			0.3		6.49	6.59	10	-	
06/30/2018	0.001	1	124				12	-	32			0.3		6.46	6.54	10	-	
07/31/2018	0.004	-	161	5.9		61	-		-			0.3		6.42	6.88	10	-	
08/31/2018	0.004	5	150	-			_		33			0.3		6.69	6.79	10	-	
09/30/2018	0.002	4	172	4	172	55	13	1	28			0.3		6.57	6.71	5	2420	0.73

#### Bayville Village Fact Sheet Appendix C - Statement for Reduced/Waived Toxics Testing

#### STATE OF MAINE

#### DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### CHAPTER 530.2(D)(4) CERTIFICATION

Essilia.Marsa

Sinc	e 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:

MEDDEC#

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	1 <sup>st</sup> Quarter	2 <sup>nd</sup> Quarter	3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter
WET Testing				
Priority Pollutant Testing				
Analytical Chemistry				
Other toxic parameters <sup>1</sup>				

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.

<sup>1</sup> This only applies to parameters where testing is required at a rate less frequently than quarterly.

#### BAYVILLE VILLAGE CORPORATION PUBLICLY OWNED TREATMENT WORKS, APPLICATION FOR SECTION 301(h) TO VARIANCE FROM THE SECONDARY TREATMENT REQUIREMENTS OF THE CLEAN WATER ACT

TENTATIVE DECISION OF THE REGIONAL ADMINISTRATOR PURSUANT 40 C.F.R. § 125, SUBPART G

The Bayville Village Corporation (BVC or permittee), is a publicly owned treatment works located in the Town of Boothbay Harbor, Maine. The BVC has submitted a waiver application pursuant to Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987 (the Act). The U.S. Environmental Protection Agency (EPA or Region 1) has reviewed the merits of this application for the waiver request. Based on this review, it is my tentative decision that BVC 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.

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BVC's application is seeking approval for the discharge of up to a monthly average of 15,000 gallons per day of primary treated waste water generated by residential homes within the village of Bayville. The BVC 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 December 4, 1985, and subsequently renewed on September 16, 2008. It is my tentative decision that the BVC be granted a renewal of the variance in accordance with the terms, conditions, and limitations of the attached decision document. This determination is subject to concurrence by the State of Maine as required by Section 301(h) of the Act. Region 1 has prepared a draft NPDES permit in accordance with this decision.

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

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

Date: \_\_\_\_\_

Alexandra Dapolito-Dunn, Regional Administrator Environmental Protection Agency Region 1

#### TENTATIVE DECISION DOCUMENT

#### ANALYSIS OF THE APPLICATION FOR A SECTION 301(h)

#### SECONDARY TREATMENT VARIANCE

FOR

#### THE BAYVILLE VILLAGE CORPORATION

#### WASTEWATER TREATMENT PLANT

#### ENVIRONMENTAL PROTECTION AGENCY REGION 1 - NEW ENGLAND

December 2018

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#### LIST OF ABBREVIATIONS

BIPBalanced Indigenous Population
e i
BOD <sub>5</sub> Biological Oxygen Demand
CWAClean Water Act
CZMCoastal Zone Management
DMRDischarge Monitoring Report
DODissolved Oxygen
EPAEnvironmental Protection Agency
gpdgallons per day
MDEPMaine Department of Environmental Protection
MGDmillion gallons per day
WQSSurface Water Quality Standards
NPDESNational Pollution Discharge Elimination System
BVCBayville Village Corporation
SCUBASelf-Contained Underwater Breathing Apparatus
TSDAmended 301(h) Technical Support Document (1994)
TSSTotal Suspended Solids
WETWhole Effluent Toxicity
WQAWater Quality Act
WQSWater Quality Standards
ZIDZone of Initial Dilution

#### I. SUMMARY

The applicant, the Bayville Village Corporation (BVC or permittee) is seeking a variance from secondary treatment requirements for a monthly average flow of up to 15,000 gallons per day (gpd) of waste water from its wastewater treatment plant. The treatment plant is located in the Town of Boothbay Harbor, Maine and discharges its effluent to Linekin Bay, a Class SB waterway as classified by 38 Maine Revised Statutes (M.R.S.) § 469. See Figure 1 of the Fact Sheet for a location map.

EPA followed the guidance provided in EPA's Amended Section 301(h) Technical Support Document (1994) for evaluating the improved discharge for a small applicant (average dry weather flows below 5.0 MGD). The Region relied on information in a 1994 document entitled "301(h) Facilities in Maine, Determining the Necessary Scope of Study for Assurance of Environmental Protection," prepared by the Maine Department of Environmental Protection (MEDEP or the Department)<sup>1</sup>, as well as monthly compliance data generated by BVC in accordance with the terms and conditions of its NPDES Permit/Maine Discharge License for the period from 2013 through 2018.

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

- 1. The treatment system's ability to maintain a monthly average of 30 percent (%) removal rate of five-day biochemical oxygen demanding (BOD<sub>5</sub>) 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.

<sup>&</sup>lt;sup>1</sup> MEDEP, 301(h) Facilities in Maine, Determining the Necessary Scope of Study for Assurance of Environmental Protection, October 27, 1994.

#### II. INTRODUCTION

BVC has requested a renewal of its five-year variance from the secondary treatment requirements for its publicly owned treatment works (POTW) pursuant to Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987. This tentative decision document summarizes the findings, conclusions and recommendations of the Environmental Protection Agency (EPA), Region 1 with regards to BVC's 301(h) waiver request. The conclusions and recommendations in this document are based on the application of the requirements set forth in 40 C.F.R. § 125, Subpart G to BVC's discharge.

The applicant's most recent combined EPA Permit and Maine State License expired on September 16, 2013. BVC applied for a renewal of its Section 301(h) variance on October 9, 2013 and, upon request, submitted an updated application for a Section 301(h) variance on October 18, 2013. The expired permit remains in effect under the provisions of 40 C.F.R. § 122.6.

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

#### **III. DESCRIPTION OF TREATMENT FACILITY**

The BVC sewer system serves a small seasonal residential community of 25 houses. The properties are subject to seasonal water availability<sup>2</sup>. The public water supply is available from May first though the third Thursday in October of each year. Half of the gravity collection system flows to a pump station and then to the treatment plant. The other half of the collection system flows by gravity directly to the treatment plant. The two waste streams are blended at the treatment plant. The collection system has no stormwater contribution and only minimal infiltration/inflow (I/I).

The BVC waste water treatment facility provides a primary level of treatment via a series of septic tanks, and disinfection via chlorination and dechlorination prior to discharge. Sanitary wastewater from twelve (12) residences flows by gravity to a 3,500-gallon septic tank which in turn is pumped to the first of two 6,000-gallon tanks set up in series. Thirteen (13) additional residences are tied into the first 6,000-gallon tank and then the combined waste streams are conveyed to the second 6,000-gallon tank for additional settling. The waste waters are disinfected in a chlorine contact tank using a flow based chemical feed of sodium hypochlorite. Sodium bisulfite is used to dechlorinate the effluent prior to discharge to Linekin Bay.

## IV. DESCRIPTION OF RECEIVING WATER

<sup>&</sup>lt;sup>2</sup>301(h)-Modified NPDES Permit Reissuance Questionnaire for Small Discharge in Maine, May 27, 2014.

Linekin Bay at the point of discharge is a marine water subject to tidal action with a difference in tides (mean high to mean low) of up to 11 feet, with strong currents. Maine law, 38 M.R.S. § 469 classifies the receiving waters at the point of discharge as Class SB waters. Maine law, 38 M.R.S. § 465-B(2) contains the classification standards for Class SB waters.

BVC's waste water treatment facility discharges to a shellfish harvesting area that the Maine Department of Marine Resources (DMR) has designated as shellfish Area 22, Booth Bay and vicinity (Southport, Boothbay Harbor, Boothbay), and is closed to shellfishing as of March 31, 2008.

#### V. PHYSICAL CHARACTERISTICS OF THE DISCHARGE

#### A. Dilution Factors

Pursuant to 40 C.F.R. § 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.

Discharge is through a polyvinylchloride (PVC) outfall pipe measuring four inches in diameter that extends out into the receiving water approximately 470 feet shore into Linekin Bay<sup>3</sup>. The existing outfall pipe was extended January of 2013<sup>4</sup>. The outfall is now submerged in 21 feet of water at mean low tide and up to 32 feet below high tide.

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

- (2) For estuaries where tidal flow is dominant and marine discharges, dilution factors are calculated as follows. These methods may be supplemented with additional information such as current studies or dye studies.
  - (a) For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.
  - (b) For discharges to estuaries, dilution must be calculated using a method such as MERGE, CORMIX or another predictive model determined by the Department to be appropriate for the site conditions.

<sup>&</sup>lt;sup>3</sup> Email from Chris Higgins, Contract Operator, dated July 6, 2018, Titled Outfall Location

<sup>&</sup>lt;sup>4</sup> 301(h)-Modified NPDES Permit Reissuance Questionnaire for Small Discharge in Maine, May 27, 2014.

(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 15,000 gpd were as follows.

Acute = 271:1 Chronic = 1,321:1 Harmonic mean = 3,963:1

The effluent is less dense than sea water and flows quickly to the surface and spreads out. Strong lateral currents, significant tidal ranges (11+ feet), and wave action provide rapid mixing.

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

# VI. APPLICATION OF STATUTORY AND REGULATORY CRITERIA

## **B.** Primary or Equivalent Treatment Requirements

[Section 301(h) of the Clean Water Act, 40 C.F.R. § 125.57, 40 C.F.R. § 125.58(r) and 40 C.F.R. § 125.60]

Section 301(h) of the Clean Water Act requires that an applicant for a 301(h) waiver of secondary treatment must demonstrate, among other things, that that the discharger will be discharging effluent that has received at least primary or equivalent treatment.

Section 301(h)(9) defines primary or equivalent treatment as "screening, sedimentation and skimming adequate to remove at least 30 percent of the biological oxygen demanding material and of the suspended solids in the treatment works influent, and disinfection, where appropriate." (See also 40 C.F.R. §§ 125.57, 125.58(r) and 125.60). It is noted that MEDEP's definition of primary treatment differs from the federal definition, in that it requires 50% removal of total suspended solids (TSS).

The permit has flow limits, concentration and mass limitations for BOD<sub>5</sub> and TSS, as well as limits for fecal coliform, enterococci bacteria, pH, and total residual chlorine. See the Fact Sheet for an explanation of the limits derivation. See Fact Sheet Appendix B for a summary of Discharge Monitoring Report data for the period from August 2013 through September 2018. The reported exceedances were: one monthly BOD<sub>5</sub> concentration in May 2014, eight exceedances of TSS monthly average mass load (Aug 2013, April 2014, June 2014, July 2014, Dec 2014, Aug 2015, Feb 2016, and July 2016), and two exceedances of Fecal Coliform daily maximum colonies (June 2015 and Sep 2018).

# C. Existence of and Compliance with Applicable Water Quality Standards [40 C.F.R. § 125.61]

40 C.F.R. § 125.61(a) specifies that there must be a water quality standard applicable to each pollutant for which a modification is requested, specifically biochemical oxygen demand (or dissolved oxygen), total suspended solids, and pH. The applicant must: (1) demonstrate that the modified discharge will comply with such water quality standards and; (2) provide a determination, signed by the certifying authority (i.e., the MEDEP), that the proposed modified discharge will comply with applicable provisions of State law, including water quality standards (40 C.F.R. §§ 125.61(b)(1) and (2)).

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

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

# 1. Dissolved Oxygen (DO) [40 C.F.R. § 125.61(a)(1)]

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

EPA finds that there is no reasonable potential for the discharge to cause or contribute to a violation of the Maine DO criteria due to the available dilution as well as technology-based BOD<sub>5</sub> effluent limits which control the amount of oxygen consuming organic matter discharged from the Facility. The largely buoyant freshwater discharge from the outfall quickly rises to the surface. Strong currents quickly dilute and disperse the effluent (See more in the following Section). The ability of treated effluent to depress ambient DO levels is not immediate. H. W. Streeter and Earle B. Phelps developed the DO sag equation, which demonstrates that the effects of effluent biochemical oxygen demand occur over time. The rapid dilution 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 Bayville Village's outfall and as such, the discharge complies with 40 C.F.R. § 125.57(a)(2). This is consistent with findings from the 2012 State of the Gulf of Maine Report - Eutrophication, which reported that there are no major problems with dissolved oxygen in the open ocean, non-estuarine portions of the Gulf of Maine.<sup>5</sup>

# 2. Suspended Solids [40 C.F.R. § 125.61(a)(2)]

The Maine water quality standards do not include numeric criteria for suspended solids, but narrative criteria are included in Title 38 of Maine Law at:

<sup>&</sup>lt;sup>5</sup> Liebman, M. et. al. *State of the Gulf of Maine Report – Eutrophication*, page 12-13, June 2012 available at <u>http://www.gulfofmaine.org/2/wp-content/uploads/2014/03/eutrophication.pdf</u>.

M.R.S. § 464(4)(A)(4), which states that: ... the department may not issue a water discharge license for any of the following discharges: ... Discharge of pollutants to waters of the State that imparts color, taste, <u>turbidity</u> (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,

M.R.S. § 464(4)(B), which states that: All surface waters of the State shall be free of settled substances which alter the physical or chemical nature of bottom material and of floating substances, except as naturally occur, which impair the characteristics and designated uses ascribed to their class.

Rather than settling near the outfall, buoyant effluent rises toward the surface and is greatly dispersed. The Fact Sheet includes an explanation and supporting science to show there is no concentrated deposition of settleable solids as a result of the permitted discharge.

The proposed permit requires effluent monitoring of suspended solids to determine compliance with technology-based requirements. Such monitoring will provide additional confirmation that this discharge is consistent with water quality.

## 3. pH [40 C.F.R. § 125.61(a)(3)]

Maine law 38 M.R.S. § 464(4)(A)(5) specifies that no discharge shall cause the pH of marine water to fall outside the range of 7.0 - 8.5 standard units. The current NPDES permit established a technology-based pH range limit of 6.0 - 9.0 standard units pursuant to Department rule, 06-096 CMR Ch. 525(3)(III)(c), see also 40 C.F.R. § 133.102(4)(c). It is expected that, with the available rapid mixing and dilution in the vicinity of the outfall, the technology-based pH effluent limits will ensure that the marine pH criteria will be met in the receiving water. The monitoring frequency is 1 time per week.

# D. Attainment or maintenance of water quality which assures protection of public water supplies; assures the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife; and allows recreational activities. [40 C.F.R. § 125.62]

# 1. Physical Characteristics of Discharge – Attainment of Water Quality Standards [40 C.F.R. § 125.62(a)(i-iii)]

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

In order to ensure attainment of water quality standards, the permit includes water quality-based limits on fecal coliform, enterococci bacteria, and total residual chlorine.

The applicable Maine Water Quality Standards for these pollutants (see Maine law 38 M.R.S. §§ 465-B(2)(B), (C)) are:

Between April 15th and October 31st, the number of enterococcus bacteria in these waters may not exceed a geometric mean of 8 CFU per 100 milliliters in any 90-day interval or 54 CFU per 100 milliliters in more than 10% of the samples in any 90-day interval. The number of total coliform bacteria or other specified indicator organisms in samples representative of the waters in 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. 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., § 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 C.F.R. § 122.44(d).

a) Fecal Coliform

Maine law 38 M.R.S. § 465-B(2)(B) specifies that the numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program.

The current permit established monthly average (geometric mean) and daily maximum limits of 15 cfu/100 ml and 50 cfu/100 ml respectively. The draft permit limits are the current National Shellfish Sanitation Program limits for Fecal coliform, with a monthly average (geometric mean) and daily maximum limits of 14 cfu/100 ml and 31 cfu/100 ml respectively. The monitoring frequency is 2/month.

As discussed in detail in Section IV, the waters of Booth Bay and vicinity (Southport, Boothbay Harbor, Boothbay) are closed to shellfishing by order of the Maine Department of Marine Resources (DMR). However, the closure is not due to bacteria discharged from the treatment plant. The permittee's compliance with its bacteria limits to date and small plant flow support the conclusion that the treatment plant's discharge does not cause or contribute to a violation of water quality standards

#### b) Enterococcus

Maine water quality standards use enterococci as indicator organisms for protection of estuarine and marine recreational waters. Because contact recreation occurs largely in the summer months, the enterococci criteria are applied seasonally. (38 M.R.S. § 465-B(2)(B)). 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 twice per month.

#### c) Total Residual Chlorine

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

Limits on TRC are specified to ensure attainment of the ambient water quality criteria for chlorine and that best practicable treatment (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. In this case, due to the higher dilution afforded by the new outfall configuration and location, a maximum daily technology-based effluent limit of 1.0 mg/L is more stringent than the water quality-based effluent limit and has been proposed in the draft permit.

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

#### 2. Impact of the Discharge on Public Water Supplies [40 C.F.R. § 125.62(b)]

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

#### 3. Biological Impact of Discharge [40 C.F.R. § 125.62(c)]

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

See the discussion in Section VI.C.7(a) of this document. The area at the point of discharge is indistinguishable from control areas supporting a BIP of fish, shellfish, and wildlife.

## 4. Impact of Discharge on Recreational Activities (40 C.F.R. § 125.62(d))

The discharge must allow for the attainment or maintenance of water quality which allows for recreational activities beyond the zone of initial dilution, including, without limitation, swimming, diving, boating, fishing and picnicking, and sports activities along shorelines and beaches. (40 C.F.R. § 125.62(d)(1)).

The draft permit has enterococci bacteria limits. Maine water quality standards use enterococci as indicator organisms for protection of estuarine and marine recreational waters (38 M.R.S. § 465-B(2)(B)). Because contact recreation occurs largely in the summer months, the enterococci criteria are applied seasonally, from April 15th through October 31<sup>st</sup>.

# 5. Additional requirements for applications based on improved or altered discharges [40 C.F.R. § 125.62(e)]

In the January of 2013, the Bayville Village outfall pipe was extended, to a depth of 21 feet below mean low tide. As a result of this outfall extension reduces any potential impact of the discharge since it provides additional dilution in deeper offshore waters. Therefore, there are no additional requirements necessary as a result of this outfall location alteration.

## 6. Stressed Waters [40 C.F.R. § 125.62(f)]

This section requires that in determining compliance with the above-mentioned sections, that the assessment of the permittee's modified discharge take into account "pollutants from other sources." The State of Maine 2016 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 Category 5-B-1(a): Estuarine and Marine Waters Impaired for Bacteria Only – TMDL.

The waters listed are closed for shellfishing by the Maine Department of Marine Resources (DMR), Area 22 (See Figure 1). 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. The new year-round fecal coliform effluent limits will ensure that the discharge does not cause or contribute to an exceedance of fecal coliform levels in the receiving water during the entire year.

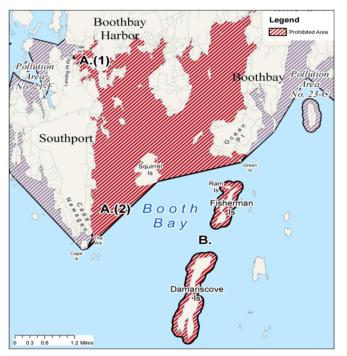


Figure 1 Maine DMR Shellfish Closure Area

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 VI.C.1(a), compliance with the monthly average and daily maximum limitations for fecal coliform bacteria will ensure the BVC facility will not cause or contribute to the closure of the shellfish harvesting or to the waterbody's impairment.

The 2016 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 199). EPA is not aware of any PCBs or persistent, bioaccumulating substances being discharged from the BVC wastewater treatment that cause or contribute to this impairment.

# 7. Establishment of Monitoring Programs [40 C.F.R. § 125.63]

Federal regulation 40 C.F.R. § 125.63(a)(1)(i)(A) requires that the applicant develop a monitoring program designed to evaluate the impact of the modified discharge on the marine biota, demonstrate compliance with applicable water quality standards, and measure toxic

substances in the discharge. 40 C.F.R. § 125.63(a)(2) allows the Administrator to require revisions to the proposed monitoring program before issuance of a modified permit and during the term of any modified permit.

a) Ambient Biological Monitoring

The first round of Maine 301(h) waiver permits included requirements for sediment monitoring and benthic surveys to be conducted by SCUBA divers. To alleviate the cost of each waiver applicant conducting their own SCUBA surveys, MEDEP agreed to conduct the SCUBA surveys on behalf of the applicants. Between 1987 and 1994 four surveys were conducted by MEDEP biologist/SCUBA divers.

The results of the "field surveys and sampling of several facilities demonstrate that there is no impact, nor is any impact likely, from the discharge of primary treated waste water from the 301 (h) participating facilities." The biologists found no solids deposition within the outfall zone of initial dilution (ZID) or the control sites. They found no discernable difference between bottom dwelling organisms, flora and fauna within the ZID and again at control sites. At all four of the facilities surveyed, the divers also observed that, due to its relatively low density, the effluent rose toward the surface of the ocean and was quickly dispersed by longshore currents.

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

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

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

#### b) Effluent Monitoring

The NPDES permit contains monitoring conditions that will provide data on the quality of the effluent discharged including flow, BOD<sub>5</sub>, TSS, settleable solids, fecal coliform, enterococci bacteria, total residual chlorine, mercury and pH.

# E. Effect of Modified Discharge on Other Point and Nonpoint Sources [40 C.F.R. § 125.64]

40 C.F.R. § 125.64(a) states that no modified discharge may result in any additional pollution control requirements on any other point or nonpoint source, and 40 C.F.R. § 125.64(b) requires that the applicant obtain a determination from the State or interstate agency having authority to establish waste load allocations indicating whether the applicant's discharge will result in any additional treatment pollution control, or other requirement on any other point or nonpoint source. BVC anticipates receiving a determination from the MEDEP indicating that the applicant's discharge will not result in additional treatment or other requirements on other point sources prior to issuance of the final NPDES permit.

#### F. Toxics Control Program [40 C.F.R. § 125.66]

#### 1. Chemical Analysis [40 C.F.R. § 125.66(a)(2)]

BVC 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 C.F.R. § 125.66(a)(2), 40 C.F.R. § 125.66(b), and 40 C.F.R. § 125.66(c)]

Given the nature of the source of the discharge (residential entities) BVC has determined to the best of its knowledge, that there are no sources of toxic pollutants being conveyed to the treatment plant. Therefore, an industrial pretreatment program is not required pursuant to 40 C.F.R. § 125.66(c).

#### 3. Nonindustrial Source Control Program [40 C.F.R. § 125.66(d)]

Under 40 C.F.R. § 125.66(d), the applicant must submit a proposed public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into its POTW. The requirement to submit and implement a public education program is included in Part I.H of the Draft Permit.

The requirement in 40 C.F.R. § 125.66(d)(2) for the permittee to develop and implement a nonindustrial source control does not apply to small applicants that certify that there are no known or suspected water quality, sediment accumulation, or biological problems related toxic pollutants or pesticides in its discharge. BVC qualifies as a small applicant and provided this certification with their application submissions.

# G. Increase in Effluent Volume or Amount of Pollutants Discharged [40 C.F.R. § 125.67]

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

The BVC discharge will not result in any substantially increased discharge of these pollutants.

All 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.

40 C.F.R. § 125.67(b) requires that where pollutants discharges are attributable in part to combined sewer overflows, the applicant minimize existing overflows and prevent increases in the amount of pollutants discharged. There are no CSOs associated with the BVC collection system. Therefore, BVC is in compliance with 40 C.F.R. § 125.67(b).

## H. Special Conditions for Section 301(h) Modified Permits [40 C.F.R. § 125.68]

Each section 301(h) modified permit issued must contain, in addition to all applicable terms and conditions required by 40 C.F.R. § 122, the following:

# 1. Effluent limits and mass loadings which will assure compliance with the requirements of this subpart (40 C.F.R. § 125.68(a));

The NPDES permit contains such effluent limits and mass loadings.

### 2. A schedule or schedules of compliance for:

a) 40 C.F.R. § 125.68(b)(1), Pretreatment program development required by section 125.66(c).

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

b) 40 C.F.R. § 125.68(b)(2), Nonindustrial toxics control program required by section 125.66(d).

Part I.H of the Draft Permit includes a schedule requiring implementation of a public education program designed to minimize the entrance of non-industrial toxic pollutants and pesticides into the collection system and wastewater treatment facility.

c) 40 C.F.R. § 125.68(b)(3), Control of combined sewer overflows required by section 125.67.

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

## 3. Monitoring Program requirements (40 C.F.R. §125.68(c) that include:

a) Biological monitoring requirements of section 125.63(b).

EPA has not required a biological monitoring program in the Draft Permit. The decision by EPA and MEDEP to use effluent limits and monitoring requirements in place of an ambient biological monitoring program is discussed in Section 4 of the Fact Sheet.

b) Water quality requirements of section 125.63(c).

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

c) Effluent monitoring requirements of §§ 125.60(b), 125.62(c) and (d), and 125.63(d).

The Draft Permit contains appropriate effluent monitoring and reporting requirements to satisfy the above regulatory requirements.

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

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

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

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

## I. 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.

#### J. Endangered or Threatened Species

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

Section 7(a)(2) of the ESA requires every Federal agency, in consultation with and with the assurance of the Secretary of Interior, to ensure that any action it authorizes, funds or carries out, in the United States or upon the high seas, is not likely to likely to adversely affect the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. The United States Fish and Wildlife Service (USFWS) administers Section 7 consultations for freshwater species. The National Marine Fisheries Service (NMFS) administers Section 7 consultations for marine and anadromous species.

The Federal action being considered in this case is EPA's reissuance of the NPDES Permit and Waiver from Secondary Treatment for the Facility. As the federal agency charged with authorizing the discharge from this Facility, EPA initiated consultation under § 7(a)(2) of the ESA with the February 16, 2016 meeting with NMFS.<sup>6</sup> Following the meeting, EPA sent a detailed letter with supporting materials to NMFS concerning all eight municipal permits with waivers (301(h)) from secondary treatment in Maine. The letter requested that NMFS concur with EPA that re-permitting the 8 facilities is not likely to adversely affect the continued existence of any listed species or result in the destruction or adverse modification of critical habitat.<sup>7</sup> NMFS concurred with EPA's finding by letter April 12, 2017. The letter said in part:

We have completed our consultation under section 7 of the Endangered Species act (ESA) in response to your letter received April 5, 2017. We reviewed your consultation request document and related materials. Based on our knowledge, expertise, and your materials, we concur with your conclusions that the proposed action is not likely to adversely affect the NMFS ESA-listed species and/or designated critical habitat. We also concur with your analysis and conclusion provided in your correspondence that the proposed action will not result in the destruction or adverse modification of the proposed critical habitat, and conference is not necessary. Therefore, no further consultation pursuant to section 7 of the ESA is required.<sup>8</sup>

As of the development of this Fact Sheet, EPA has obtained no new information that would change the basis of EPA's April 5, 2017, determination that the proposed action will not result in the destruction or adverse modification of the proposed critical habitat.

<sup>&</sup>lt;sup>6</sup> February 16, 2016 Meeting with Christine Vaccaro, Section 7 Fisheries Biologist of the NOAA Protected Resources Division, Phil Colarusso and Doug Corb EPA, RI and Mark Johnson, Marine Habitat Resource Specialist at the NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) in Gloucester, MA.

<sup>&</sup>lt;sup>7</sup> April 5, 2017 letter to Kimberly Damon-Randall, Assistant Regional Administrator for NMFS Protected Species, from Ellen Weitzler P. E., Chief, Municipal Permits Branch EPA Region 1.

<sup>&</sup>lt;sup>8</sup> April 12, 2017 letter from Kimberly Damon-Randall, Assistant Regional Administrator for NMFS Protected Species, to Ellen Weitzler P. E., Chief, Municipal Permits Branch EPA Region 1.

#### K. 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.

#### L. Essential Fish Habitat (EFH)

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (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.

#### 1. Description of Proposed Actions

This proposed action is the reissuance of existing NPDES permit and accompanying Clean Water Act Section 301(h) waiver authorizing the discharge of primary treated waste water to the marine receiving waters.

EPA met with Mark Johnson, Marine Habitat Resource Specialist, with the National Marine Fisheries Service, Northeast Regional Office in Gloucester Mass concerning the permitted discharge to Essential Fish Habitat. The meeting was held concurrently with the ESA Section 7 consultation mentioned in the previous section of this Fact Sheet.<sup>9</sup> The initial meeting was followed by a letter from EPA to Louis A. Chiarella, Assistant Regional Administrator, Habitat Conservation Division, NMFS.<sup>10</sup> The letter stated in part:

EPA believes that the conditions and limitations contained within the proposed permit adequately protect all aquatic life, including those with designated EFH in the receiving water, and that further mitigation is not warranted. If adverse impacts to EFH are detected because of this permit action, or if new information is received that changes the basis for these conclusions, EPA will contact NMFS Habitat Division.

<sup>&</sup>lt;sup>9</sup> February 16, 2016 Meeting with Christine Vaccaro, Section 7 Fisheries Biologist of the NOAA Protected Resources Division, Phil Colarusso and Doug Corb EPA, RI and Mark Johnson, Marine Habitat Resource Specialist at the NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) in Gloucester, MA.

<sup>&</sup>lt;sup>10</sup> Letter from Doug Corb, EPA Region 1 Municipal Permits Branch to Louis A. Chiarella, Assistant Regional Administrator, Habitat Conservation Division, NMFS., Dated June 29, 2017.

As of the development of the documents to support this decision, EPA has obtained no new information that would change the basis of EPA's June 29, 2017, determination that further mitigation is not warranted. NMFS will receive the Draft Permit, Fact Sheet, and the Tentative Decision Document during the 30-day public notice comment period. NMFS may revisit EFH consultation based on these documents or new information, if warranted.

#### 2. EFH Species

The discharge location (N 43° 51' 27.70" N, W 69° 36' 9.83" W) falls within the EFH designation for the following 10-minute square shown in Table 1.

The species listed in the table below are believed to be the only managed species present during one or more life stages within the area which encompasses the discharge site. No "habitat area of particular concern." as defined under § 600.815(a)(9) of the Magnuson-Stevens Act, has been designated for this site.

Boundary	North	Eas	t	South		West		
Coordinate	· · · · · · · · · · · · · · · · · · ·		30.0 W	43° 50.0	43° 50.0 N		69° 40.0 W	
Species			Eggs	Larvae	Juveniles		Adults	
Atlantic salmon (Salmo salar)					Х		Х	
Atlantic cod (Gadus morhua)				Х	Х		Х	
haddock (Melanogrammus aeglefinus)								
pollock (Pollachius virens)					Х			
whiting (Merluccius bilinearis)					Х		Х	
offshore hake (Merluccius albidus)								
red hake (Urophycis chuss)					Х		Х	
white hake (Urophycis tenuis)					Х		Х	
redfish (Sebastes fasciatus)			n/a					
witch flounder (Gly	witch flounder (Glyptocephalus cynoglossus)							
winter flounder ( <i>Pseudopleuronectes ameri-</i> canus)			Х	Х	Х		Х	
yellowtail flounder (Limanda ferruginea)			X	X				
windowpane flounder (Scophthalmus aquosus)			Х	X	X		X	
American plaice (Hippoglossoides plates- soides)			Х	Х	Х		Х	
ocean pout (Macrozoarces americanus)			Х	X	Х		Х	
Atlantic halibut (Hippoglossus hippoglossus)								
Atlantic sea scallop ( <i>Placopecten magellan-icus</i> )		Х	Х	X		X		
Atlantic sea herring (Clupea harengus)				Х	Х		Х	
monkfish (Lophius	americanus)							
bluefish (Pomatomus saltatrix)				Х		Х		
long finned squid (Loligo pealeii)			n/a	n/a				
short finned squid (Illex illecebrosus)			n/a	n/a				
Atlantic butterfish (Peprilus triacanthus)								
Atlantic mackerel (Scomber scombrus)					Х		Х	

summer flounder (Paralichthys dentatus)			
scup (Stenotomus chrysops)	n/a	n/a	
black sea bass (Centropristis striata)	n/a		
surf clam (Spisula solidissima)	n/a	n/a	
ocean quahog (Artica islandica)	n/a	n/a	
spiny dogfish (Squalus acanthias)	n/a	n/a	
tilefish (Lopholatilus chamaeleonticeps)			
bluefin tuna (Thunnus thynnus)			Х

#### VIII. STATE CONCURRENCE IN VARIANCE

Permittees may not be granted a Section 301(h) variance, as specified under Section 301(h) of the Act and 40 C.F.R. § 125.59(i)(2), until the appropriate State certification/concurrence is granted or waived pursuant to 40 C.F.R. § 124.54. EPA expects that the State of Maine will make such a determination upon review of the proposed draft permit conditions.

#### IX. CONCLUSION

EPA has determined that BVC treated effluent will receive sufficient initial dilution and mixing such that the discharge will comply with all of the requirements of Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987, and 40 C.F.R. § 125, Subpart G.

#### X. TENTATIVE DECISION

For the reasons discussed in this tentative decision document, EPA is tentatively approving BVC request to discharge primary effluent to Linekin Bay. This tentative decision is contingent upon the following conditions:

- 1. The BVC treatment system maintaining a 12-month rolling average of 30% removal of BOD<sub>5</sub> 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.

#### IX. PUBLIC COMMENTS

The public notice will be placed on the EPA Region 1 NPDES website at:

<u>http://www.epa.gov/region1/npdes/me.html</u>. 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 MacLean. 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 MacLean U.S. Environmental Protection Agency Mail Code – OEP06-4 5 Post Office Square – Suite 100 Boston, MA 02109-3912 Phone: 617-918-1608 Email: maclean.douglas@epa.gov DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER QUALITY STATE HOUSE STATION #17 AUGUSTA, ME. 04333-0017 UNITED STATE ENVIRONMENTAL PROTECTION AGENCY OFFICE OF ECOSYSTEM PROTECTION 5 POST OFFICE SQUARE 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: December 27, 2018

PERMIT NUMBER: ME0101664

PUBLIC NOTICE NUMBER: ME-004-019

NAME AND MAILING ADDRESS OF APPLICANT:

Bayville Village Corporation 27 Sea St Boothbay Harbor, Maine 04538

NAME AND ADDRESS OF THE FACILITY WHERE DISCHARGE OCCURS:

#### Bayville Village Corporation 10 Briggs Lane Boothbay Harbor, Maine 04538

RECEIVING WATER: Linekin Bay - Class SB

PREPARATION OF THE DRAFT PERMIT:

The U.S. Environmental Protection Agency (EPA) and the Maine Department of Environmental Protection (MEDEP) have cooperated in the development of a Draft Permit for the Waste Water Treatment Facility, which discharges primary treated domestic wastewater. EPA is also public noticing its Tentative Clean Water Act Section 301(h) Waiver from Secondary Treatment Decision.

The effluent limits and permit conditions imposed have been drafted to assure compliance with the Clean Water Act, 33 U.S.C. sections 1251 et seq., the CMR 06, Chapters 523 and 524 and the Maine Revised Statutes, Title 38 Chapter 3 Protection and Improvement of Waters, Subchapter 1 Article 4-A § 464 (Maine Water Quality Standards).

EPA has requested that 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 <a href="https://www.epa.gov/npdes-permits/maine-draft-individual-npdes-permits">https://www.epa.gov/npdes-permits/maine-draft-individual-npdes-permits</a> or by contacting:

Doug MacLean U.S. Environmental Protection Agency – Region 1 5 Post Office Square, Suite 100 (OEP06-4) Boston, MA 02109-3912 Telephone: (617) 918-1608 E-mail: maclean.douglas@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 **February 1, 2019**, to the address listed above.

Any person, prior to such date, may submit a request in writing to EPA and MEDEP for a public hearing to consider this Draft Permit and/or the Secondary Treatment Waiver Decision. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least a thirty-day public notice whenever the Regional Administrator finds that the response to this notice indicates significant public interest. In reaching a Final Decision on this Draft Permit and Secondary Treatment Waiver Decision, the Regional Administrator will respond to all significant comments and make the responses available to the public at EPA's Boston Office.

#### FINAL PERMIT DECISION:

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a Final Permit Decision, including a Final Decision for the Secondary Treatment Waiver and forward a copy of the final decisions to the applicant and each person who has submitted written comments or requested notice. Within thirty (30) days following the notice of the Final Permit Decision, any interested person may submit petition to the Environmental Appeals Board to reconsider or contest the final decision.

Brian Kavanah, Director Division of Water Quality Management Bureau of Water Quality Maine Department of Environmental Protection Ken Moraff, Director Office of Ecosystem Protection EPA-Region 1