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

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

#### Northport Village Corporation 813 Shore Rd. Northport, Maine 04849

is authorized to discharge from a facility located at

#### Main Street, Northport, Maine

to receiving water named Penobscot Bay – Northport, Maine

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 Director of the United States Environmental Protection Agency (EPA or Region 1) and the Commissioner of the Maine Department of Environmental Protection (MEDEP or the Department). This Waste Discharge License (WDL) shall become effective immediately upon signature by the Commissioner of the Maine Department of Environmental Protection.

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

This permit supersedes the NPDES permit/WDL issued on June 29, 2004. This permit consists of the National Pollutant Discharge Elimination System Permit including effluent limitations and monitoring requirements (Part I) and MEPDES Standard Conditions Applicable to All Permits, (last revised July 1, 2002), EPA NPDES Part II Standard Conditions (April 26, 2018), and Attachment A Effluent Mercury Test Report.

Signed this 21st 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

#### IN THE MATTER OF

APPROVAL	) RENEWAL
W002575-6B-E-R	
ME0100901	)
WORKS	) WASTE DISCHARGE LICENSE
PUBLICLY OWNED TREATMENT	) DISCHARGE ELIMINATION SYSTEM
WALDO COUNTY, MAINE	) NATIONAL POLLUTANT
NORTHPORT VILLAGE CORPORATION,	)

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

#### APPLICATION SUMMARY

The permittee has applied for renewal of a combined National Pollutant Discharge Elimination System (NPDES) permit #ME0100901 and Maine Waste Discharge License (WDL) # W002575-5L-D-R that was issued on June 29, 2004 and expired on July 29, 2009. The permit/license (permit) authorizes the discharge of up to a monthly average flow of 0.063 million gallons per day (MGD) of primary treated sanitary waste water to Penobscot Bay, Class SB, in Northport, 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 0.063 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.

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

1. Increasing the dilution factors associated with the relocation of the facility outfall, based on an updated CORMIX model run prepared by the Department.

- 2. Increasing the daily maximum concentration limit for total residual chlorine based on the increase in the acute dilution factor associated with the discharge from the facility.
- 3. 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.
- 4. 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.
- 5. 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 EPA and the Department make the following conclusions:

- 1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below its classification.
- 2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
- 3. The provisions of the State's antidegradation policy, 38 M.R.S. Section 464(4)(F), will be met, in that:
  - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
  - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
  - (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

#### **ACTION**

THEREFORE, the USEPA and the Department APPROVE the above-noted application of the NORTHPORT VILLAGE CORPORATION, to discharge up to a monthly average of 63,000 gpd of primary treated waste waters to Penobscot Bay, Class SB, in Northport, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

Date of initial receipt of application:	March 13, 2009	
Date of application acceptance:	March 13, 2009	
· ·		
Date filed with Maine Board of Enviro	onmental Protection	
This order prepared by jointly GREGO	G WOOD, Bureau of Water Qua	ality and DOUG CORB,
EPA Region I.		•

#### PART I – EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

#### A. REGULATORY AUTHORITY

- 1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA or Region 1) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state Waste Discharge License (WDL) issued by the Commissioner of the Maine Department of Environmental Protection (MEDEP or the Department) pursuant to the Maine law, 38 M.R.S., Section 414-A et seq., and applicable regulations. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 C.M.R. 3.19, are hereby incorporated by reference into this surface water discharge permit/license (permit).
- 2. This authorization also incorporates the state water quality certification issued by MEDEP under § 401(a) of the Federal Clean Water Act, 40 C.F.R. § 124.53, M.G.L. c. 21, § 27. All of the requirements (if any) contained in MEDEP's water quality certification for the permit are hereby incorporated by reference into this state permit.
- 3. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit/license as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit/license is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a WDL issued by the State of Maine.

### B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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

Effluent Characteristic	Discharge Limitations			Monitoring Requi	<u>irement</u>	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	63,000 gpd [07]				Continuous [99/99]	Recorder [RC]
BOD [00310]	107 lbs/day <i>[26]</i>	Report lbs/day [26]	203 mg/L [19]	Report, mg/L [19]	1/Week [01/07]	Composite [24]
BOD % Removal (1) [50076]			30 % [23]		1/Month [01/30]	Calculate [CA]
TSS [00530]	76 lbs/day <i>[26]</i>	Report lbs/day [26]	145 mg/L <i>[19]</i>	Report, mg/L [19]	1/Week [01/07]	Composite [24]
TSS % Removal (1) [81011]			50 % [23]		1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]			Report (mg/L) [25]	Report (mg/L) [25]	1/Week [01/07]	Grab [GR]
Fecal Coliform Bacteria (2) [31615] (year-round)			14cfu/100 mL <i>[30]</i>	31cfu/100 mL [30]	1/Week [01/07]	Grab [GR]
Enterococci bacteria (2,4) [61211] (April 15th – October 31st each year)			8 cfu/100 mL <i>[30]</i>	54 cfu/100 mL [30]	1/Week [01/07]	Grab [GR]
Total Residual Chlorine (3,4) [50060]				0.3 mg/L <i>[19]</i>	1/Day [01/01]	Grab [GR]
pH (Std. Units) [00400]	The pH m	The pH must not be less than 6.0 or greater than 9.0 at any time.			5/week [01/01]	Grab [GR]
Mercury (Total) (4,5) [71900]			33.4 ng/L [3M]	50.1 ng/L [3M]	1/Year [01/YR]	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 shall achieve at least 30% removal for BOD and 50% removal for TSS. For the purposes of calculating a monthly average percent removal, the permittee shall use the measured monthly average influent and effluent concentrations.

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

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

Where 290 mg/L is the default influent BOD<sub>5</sub> Concentration in mg/L

 $X = Monthly Average BOD_5$  effluent concentration in mg/L

Y = Actual Monthly Average BOD<sub>5</sub> Percent Removal

#### Calculating TSS Monthly Average 50% Removal Limit

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(290 \text{ mg/L} - \text{X mg/L}) * (100\%) = \text{Y \% Removal}
(290 mg/L)
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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 15th October 31st 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.
- 3. Total residual chlorine (TRC) Limitations and monitoring requirements for TRC are in effect whenever elemental chlorine or chlorine-based compounds are utilized for disinfection or cleaning. The permittee shall utilize approved test methods that are capable of bracketing the limitations in this permit.
- 4. Required for State Certification.
- 5. Mercury All mercury sampling (1/Year) required to determine compliance with interim limitations established pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001) shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses shall be conducted in accordance with EPA Method 1631E, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See Attachment A, *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results. Compliance with the monthly average will be based on the cumulative arithmetic mean of all mercury tests results that were

conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

#### 2. Sampling

Sampling for all parameters must be collected after the last treatment process prior to discharge to the receiving water. Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (C.F.R.) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 C.F.R. Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to Waste Discharge Licenses 38 M.R.S. § 413 are subject to the provisions and restrictions of Maine Comprehensive and Limited Environmental Laboratory Certification Rules, 10-144 CMR 263 (last amended April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 C.F.R. part 136 or as specified in this permit, all results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

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

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

#### 3. 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 for 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 for 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 for 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 MEDEP)

The treatment facility must be operated by a person holding a minimum of a **Grade I** certificate or higher (or Registered Maine Professional Engineer) pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S., Sections 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 the terms and conditions of this permit and only from the outfall(s) listed in Part 1.B.1. Discharges of waste water from any other point sources, including sanitary sewer overflows (SSOs) are not authorized under this permit, and shall be reported in accordance with Part D.1.e of the Standard Conditions 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) shall not pass through the POTW or interfere with the operation or performance of the works.

#### G. WET WEATHER FLOW MANAGEMENT PLAN

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

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

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

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

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

By December 31 of each year and within 90 days of any process changes or minor equipment upgrades [PCS Code 09699], the permittee must evaluate and modify the O&M

Plan including site plan(s) and schematic(s) for the waste water treatment facility to ensure that it is up-to-date. The O&M Plan shall be kept on-site at all times and made available to Department and EPA personnel upon request.

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

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

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

#### I. OPERATION AND MAINTENANCE OF THE 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. Provisions to meet this requirement must be described in the O&M Plan required in Section H, above.

#### 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. Provisions to meet this requirement must be described in the O&M Plan required in Section H, above.

#### 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 and high flow related violations of the wastewater treatment plant's effluent limitations, or excessive I/I.

#### 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 must 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; and
- 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 CMR 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 requirement.

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

#### K. SLUDGE AND/OR SEPTAGE USE/DISPOSAL

- 1. The permittee must comply with all existing federal and state laws and regulations that apply to sludge and/or septage use and disposal practices, including EPA regulations promulgated at 40 C.F.R. Part 503.
- 2. If both state and federal requirements apply to the permittee's septage use and/or disposal practices, the permittee must comply with the more stringent of the applicable requirements.
- 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 shall 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 Maine NPDES permit holders to submit monitoring results obtained during the previous month on an electronic discharge monitoring report to the regulatory agency utilizing the USEPA electronic system.

- 1. Electronic DMRs submitted using the USEPA CDX system, must be:
  - a. Submitted by a facility-authorized signatory; and
  - b. Submitted no later than midnight on the 15th day of the month following the completed reporting period.
- 2. Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP Toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email.
- 3. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your CDX submittal will suffice. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.
- 4. Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, must be made to EPA. This includes verbal reports and notifications which require reporting within 24 hours. (As examples, see EPA Standard Conditions, Part II.B.4.c. (2), Part

II.B.5.c. (3), and Part II.D.1.e.) Verbal reports and verbal notifications shall be made to EPA'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 Part I of this permitting action, additional site-specific information or any other pertinent information or test result obtained during the term of this permit, the Department may, at any time, and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded; (2) require additional monitoring if results on file are inconclusive; or (3) change the monitoring requirements and/or limitations based on new information.

#### **RESPONSE TO COMMENTS**

# REISSUANCE OF NPDES PERMIT AND WAIVER FROM SECONDARY TREATMENT NO. ME0100901 NORTHPORT VILLAGE CORPORATION PUBICLY OWNED TREATMENT WORKS

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, ME0100901 (Draft Permit). From December 27, 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 Northport Village Corporation (NPV 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 Richard McElhaney, the Superintendent of Utilities of Northport Village Corporation on January 31, 2019. EPA's decision-making process has benefited from the comments submitted, but the information and arguments presented did not raise any substantial new questions concerning the Draft Permit. The Final Permit is substantially identical to the Draft Permit that was available for public comment. 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 the commenter presented 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 Doug Corb, United States Environmental Protection Agency, 5 Post Office Square-Suite 100, Mail Code OEP06-1, Boston, Massachusetts 02109-3912; Telephone: (617) 918-1565. The Final Permit, as well as the Response to Comments, may also be obtained from the EPA Region 1 website at <a href="https://www.epa.gov/npdes-permits/maine-npdes-permits">https://www.epa.gov/npdes-permits/maine-npdes-permits</a>

#### **Summary of Changes to the Final Permit:**

- 1. The final permit delays the implementation of the new enterococcus limit and monitoring requirements until April 15, 2020. (see response to Comment 2)
- 2. The facility street location address will be changed to Main Street. (see response to Comment 3)
- 3. The receiving water will be changed from Belfast Bay to Penobscot Bay. (See response to Comment 7)
- 4. Additional revisions were made to correct typographical errors, including the operator grade

(Part I.D), and for clarification, including the annual deadline for sludge reports (Part I.K.3).

#### **Response to Comments**

#### Comment 1

Current Physical Plant Limitations Make It Impossible to Meet New Draft Permit Requirements; Request for Compliance Schedule; Provisional Compliance Schedule Attached NVC is predominately a seasonal community on the Coast of Maine. Historically, NVC's Utilities Department has conducted operations commensurate with the seasonality of NVC and the requirements of the previous permit.

In order to meet the new limits of the Draft Permit, NVC will need to upgrade its current physical plant [footnote states: here and throughout NVC's comments, "new physical plant" means modifications needed to address year-round disinfection monitoring systems (e.g., new structure), and does not include physical plant items that are already sufficient for NVC/s operations under the previous permit and Draft Permit (e.g., all underground settling tanks, chlorination chambers, dechlor manholes and influent and effluent monitoring manholes.)]. NVC's Utility Operations include, as part of the physical plant, a small structure that houses a flow recorder, two (2) liquid chemical feed tanks, two (2) metering pumps and an Isco automatic sampler for use in its primary treatment plant system. This structure is approximately four feet by ten feet in area dimensions, and four to six feet in height. A photograph is attached as Exhibit A, depicting this structure and its location relative to the shore.

This structure is not winterized or designed for year-round use, and is inadequate to safely serve NVC's operating staff and Utility Operations to meet the new year-round disinfection compliance limits. Accordingly, in order to meet the new limits of the Draft Permit, NVC will need to construct a new physical plant and address human occupancy, water and sewer services, worker safety, chemical freeze protection, and code requirements that are all deficient with the existing building structure. Because of the time and resources required to complete construction of a new physical plant, NVC is requesting a Compliance Schedule as part of any Final Permit.

The proposed schedule has already started, and the goal is to install the upgrades as soon as possible. At this time, NVC has engaged Dirigo Engineering to conduct a preliminary engineering study on year-round options to address the new limits. This study is currently underway. NVC is also in the parallel process of collecting information and conducting its due diligence on construction of a new physical plant (e.g., resource assessment, land use permitting, financing, etc.). Because NVC does not yet have sufficient detailed information as of February 1, 2019 (the deadline to submit comments), it is not practical to request a Final Compliance Schedule as part of NVC's comments.

Accordingly, NVC has prepared a Provisional Compliance Schedule, attached as Exhibit B. NVC desires to work with EPA and MDEP to update this Provisional Compliance Schedule as more information is obtained, and then have a Final Compliance Schedule as part of its Final Permit.

NVC anticipates it will have additional information to update the Provisional Compliance Schedule once the preliminary engineering study is complete. NVC desires to supplement its comments with this additional information, or alternatively work with EPA and MDEP to establish a mechanism to complete and/or continuously update a Final Compliance Schedule contained in a Final Permit as information becomes available.

Depending on how and when the Final Permit is issued and becomes effective, and EPA's preferred approach to establishing a Final Compliance Schedule as part of a Final Permit, NVC requests the current limits remain in effect and the Final Compliance Schedule cover the time period leading up to May 15, 2019, and continuing until a new physical plant is constructed, commissioned, and operational. [footnote states: May 15, 2019 is when NVC will resume disinfection and corresponding testing. September 30, 2019 will mark the end of this seasonal disinfection and corresponding testing, unless and until a new physical plant is constructed to all for year round disinfection and testing.]

#### Response 1

NPV is requesting a compliance schedule to allow it to gather additional information to support the design, construction and financing of a physical plant to enable it to meet the year-round chlorination requirements that are found in the Draft Permit. As part of this request, NPV has submitted, attached as Exhibit B to its comments, a "Provisional Compliance Schedule." Rather than including a "Provisional Compliance Schedule" in the Final Permit, EPA will work with NPV to negotiate a legally-binding agreement known as an Administrative Order on Consent (Order) that will allow NPV a reasonable amount of time to design and construct the necessary upgrades to allow NPV to meet the requirements of its permit. EPA, including its enforcement staff, have reached out to Mr. Richard McElhaney, NPV Superintendent of Utilities, to begin to negotiate an Order which will be negotiated separately, and which will take effect after the Final Permit is issued. Thus, there is no need for a "Provisional Compliance Schedule" and the Final Permit remains unchanged.

#### **Comment 2**

Request to Modify Final Permit Limits/Testing Requirements, Commensurate with Test Results NVC notes the new enterococci limits introduce a brand new test that NVC must now perform, working with third party laboratories that are certified to perform such analysis. Laboratories exist in Maine to perform these tests, but are limited in number and availability. Since NVC will effectively be testing for two bacterial limits, fecal coliform and enterococci, based on the same operations, NVC respectfully requests as test results are obtained the Final Permit be modified commensurate with those test results.

#### Response 2

The permittee requests that its permit be modified in the future once it receives test results for fecal coliform and enterococci. NPV's requirement to test for both fecal coliform and now in its new permit, enterococci bacteria, will remain regardless of future test results since both types of 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. As EPA stated in the Fact Sheet with respect to the new requirement to monitor for enterococci:

Maine water quality criteria 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. The current permit does not have 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.

Fact Sheet, pg 17.

EPA agrees with NPV that laboratories for enterococcus monitoring are limited in number and availability. Thus, complying with this limit may be challenging 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 M.R.S. § 413 to test for enterococci bacteria. MEDEP reports that there is a proposed bill in the Maine legislature, which would add enterococcus 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.

#### Comment 3

Please update the street location of the facility's address to Main Street.

#### Response 3

EPA will update the facility street location in the final permit to "Main Street."

#### Comment 4

Please update the email address for contact Richard McElhaney to dmcelhaney@twc.com.

#### Response 4

We note the correction to the email address for Richard McElhaney and will use it in future correspondence with respect to this permit.

#### Comment 5

Please update the Fact Sheet to reflect the Consent Agreement between NPV and MDEP was amended and effectively closed on October 12, 2012 (see attached correspondence from the MDEP, Exhibit C to this letter).

#### Response 5

EPA acknowledges that the Consent Agreement between NPV and MEDEP was amended and closed. While the Fact Sheet is considered a final document and is not updated as a result of comments, the updated Consent Agreement is now part of the public record for this permit.

#### Comment 6

Please update the Fact Sheet regarding the chlorine dilution factors, which appear to reverse the chronic and acute values (see pp. 19-20 of the Fact Sheet).

#### Response 6

NPV correctly notes that EPA reversed the chlorine dilution factors when it calculated the acute and chronic water quality based effluent limits (WQBELs) in the Fact Sheet. The correct acute WQBEL is 6.24 mg/L. The correct chronic WQBEL is 6.53 mg/L. While the calculation error in the Fact Sheet is noted, there is no change to the total residual chlorine limit in the Final Permit since, as discussed in the Fact Sheet (see pages 20-21), the calculated WQBELs are greater than the 0.3 mg/L technology based effluent limit.

#### Comment 7

Please update the receiving water to Penobscot Bay (note: NVC recognizes whether the receiving water is Belfast Bay or Penobscot Bay, the same water classification and water quality criteria applies.)

#### Response 7

EPA has received a photograph of a map from NPV supporting its request to change the receiving water from Belfast Bay to Penobscot Bay in the Final Permit. The photograph is now part of the record. And NPV correctly notes that both waters have the same SB classification so that the same water quality criteria apply. The name of the receiving water will be changed to Penobscot Bay in the Final Permit.

#### **Comment 8**

NVC has attached a Coastal Zone Management Act ("CZMA") statement. See Exhibit D.

#### Response 8

EPA acknowledges receipt of NPV's statement about the Coastal Zone Management Act. MEDEP will address CZM certification through its approval process for this permit.

NORTHPORT VILLAGE CORP., MAINE	)	FINAL DECISION
PUBLICLY OWNED TREATMENT WORKS,	)	OF THE REGIONAL
APPLICATION FOR SECTION 301(h)	)	ADMINISTRATOR PURSUANT to
VARIANCE FROM THE SECONDARY	)	40 C.F.R. PART 125, SUBPART G
TREATMENT REQUIREMENTS OF THE	)	
CLEAN WATER ACT	)	

Northport Village Corporation operates a 63,000 gallon per day publicly owned treatment works located in Northport, Maine. Northport Village Corporation 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. It is my final decision to grant the request by the Northport Village Corporation 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 Permit Fact Sheet for the Town's Wastewater Treatment Plant and the 301(h) Tentative Decision Document that was public-noticed by the United States Environmental Protection Agency (EPA) on December 27, 2018, supplemented by public comments received and the agencies' responses to those comments.

The EPA received Northport Village Corporation's renewal application on June 2, 2014. A Tentative Decision to approve the application was public noticed on December 27, 2018. Concurrently, the EPA and the Maine Department of Environmental Protection (MEDEP) jointly proposed reissuance of a draft 301(h) modified NPDES Permit incorporating both federal NPDES and Maine Waste Discharge License requirements. The EPA and MEDEP 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 the NPDES Permit unless an appeal is filed with Environmental Appeals Board within 30 days of the final issuance of the Permit.

Date. Match 23, 2019	Date:	March 25, 2019	
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/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 et seq.; the "CWA"), and Title 38 Maine Revised Statutes § 414-A et seq.,

#### Northport Village Corporation 813 Shore Rd. Northport, Maine 04849

is authorized to discharge from a facility located at

#### Pleasant Street, Northport, Maine

to receiving water named Belfast Bay – Northport, Maine

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 Director of the United States Environmental Protection Agency (EPA or Region 1) and the Commissioner of the Maine Department of Environmental Protection (MEDEP or the Department).\* This Waste Discharge License (WDL) shall become effective immediately upon signature by the Commissioner of the Maine Department of Environmental Protection.

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

This permit supersedes the NPDES permit/WDL issued on June 29, 2004. This permit consists of the National Pollutant Discharge Elimination System Permit including effluent limitations and monitoring requirements (Part I) and MEPDES Standard Conditions Applicable to All Permits, (last revised July 1, 2002), EPA NPDES Part II Standard Conditions (April 26, 2018), and Attachment A Effluent Mercury Test Report.

Signed thisday of	Signed thisday of		
Ken Moraff, Director	Melanie Loyzim, Acting Commissioner		
Office of Ecosystems Protection	Maine Department of Environmental		
Environmental Protection Agency	Protection		
Boston, Massachusetts	Augusta, Maine		

<sup>\*</sup> 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

NORTHPORT VILLAGE CORPORATION,	)
WALDO COUNTY, MAINE	) NATIONAL POLLUTANT
PUBLICLY OWNED TREATMENT	) DISCHARGE ELIMINATION SYSTEM
WORKS	) WASTE DISCHARGE LICENSE
ME0100901	
W002575-6B-E-R	
	)
APPROVAL	) RENEWAL

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

#### APPLICATION SUMMARY

The permittee has applied for renewal of a combined National Pollutant Discharge Elimination System (NPDES) permit #ME0100901 and Maine Waste Discharge License (WDL) # W002575-5L-D-R that was issued on June 29, 2004 and expired on July 29, 2009. The permit/license (permit) authorizes the discharge of up to a monthly average flow of 0.063 million gallons per day (MGD) of primary treated sanitary waste water to Belfast Bay, Class SB, in Northport, 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 0.063 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.

This permitting action is <u>different than</u> the previous permitting action in that it is:

1. Increasing the dilution factors associated with the relocation of the facility outfall, based on an updated CORMIX model run prepared by the Department.

- W002575-6B-E-R
- 2. Increasing the daily maximum concentration limit for total residual chlorine based on the increase in the acute dilution factor associated with the discharge from the facility.
- 3. 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.
- 4. 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.
- 5. 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 EPA and the Department make the following conclusions:

- 1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below its classification.
- 2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
- 3. The provisions of the State's antidegradation policy, 38 M.R.S. Section 464(4)(F), will be met, in that:
  - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
  - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
  - (e) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
- 4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

#### **ACTION**

THEREFORE, the USEPA and the Department APPROVE the above-noted application of the NORTHPORT VILLAGE CORPORATION, to discharge up to a monthly average of 63,000 gpd of primary treated waste waters to Belfast Bay, Class SB, in Northport, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

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

#### PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application:	March 13, 2009	
Date of application acceptance:	March 13, 2009	
Date filed with Maine Board of Enviro	onmental Protection	
This order prepared by jointly GREGO	G WOOD, Bureau of Water Qual	ity and DOUG CORB,
EPA Region I.		•

#### PART I – EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

#### A. REGULATORY AUTHORITY

- 1. This authorization to discharge includes two separate and independent permit authorizations. The two permit authorizations are (i) a federal National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency (EPA or Region 1) pursuant to the Federal Clean Water Act, 33 U.S.C. §§1251 et seq.; and (ii) an identical state Waste Discharge License (WDL) issued by the Commissioner of the Maine Department of Environmental Protection (MEDEP or the Department) pursuant to the Maine law, 38 M.R.S., Section 414-A et seq., and applicable regulations. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 C.M.R. 3.19, are hereby incorporated by reference into this surface water discharge permit/license (permit).
- 2. This authorization also incorporates the state water quality certification issued by MEDEP under § 401(a) of the Federal Clean Water Act, 40 C.F.R. § 124.53, M.G.L. c. 21, § 27. All of the requirements (if any) contained in MEDEP's water quality certification for the permit are hereby incorporated by reference into this state permit.
- 3. Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit/license as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit/license is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a WDL issued by the State of Maine.

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

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

Effluent Characteristic	Discharge Limitati	ons			<b>Monitoring Requ</b>	irement
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	63,000 gpd <i>[07]</i>				Continuous [99/99]	Recorder [RC]
BOD [00310]	107 lbs/day <i>[26]</i>	Report lbs/day [26]	203 mg/L <i>[19]</i>	Report, mg/L [19]	1/Week <i>[01/07]</i>	Composite [24]
BOD % Removal (1) [50076]			30 % [23]		1/Month [01/30]	Calculate[CA]
TSS [00530]	76 lbs/day [26]	Report lbs/day [26]	145 mg/L <i>[19]</i>	Report, mg/L [19]	1/Week [01/07]	Composite [24]
TSS % Removal (1,4) [81011]			50 % [23]		1/Month [01/30]	Calculate[CA]
Settleable Solids [00545]			Report (mg/L) [25]	Report (mg/L)[25]	1/Week [01/07]	Grab [GR]
Fecal Coliform Bacteria (2) [31615] (year-round)			14cfu/100 mL /30/	31cfu/100 mL /30/	1/Week [01/07]	Grab [GR]
Enterococci bacteria (2,4) [61211] (April 15th – October 31st each year)			8 cfu/100 mL <i>[30]</i>	54 cfu/100 mL [30]	1/Week [01/07]	Grab [GR]
Total Residual Chlorine (3,4) [50060]				0.3 mg/L <i>[19]</i>	1/Day [01/01]	Grab [GR]
pH (Std. Units) [00400]	The pH must not be less than 6.0 or greater than 9.0 at any time.			5/week [01/01]	Grab [GR]	
Mercury (Total) (4,5) [71900]			33.4 ng/L [3M]	50.1 ng/L [3M]	1/Year [01/YR]	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 shall achieve at least 30% removal for BOD and 50% removal for TSS. For the purposes of calculating a monthly average percent removal, the permittee shall use the measured monthly average influent and effluent concentrations.

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

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

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

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

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 15th October 31st 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 shall utilize approved test methods that are capable of bracketing the limitations in this permit.
- 4. Required for State Certification.
- 5. Mercury All mercury sampling (1/Year) required to determine compliance with interim limitations established pursuant to *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 CMR 519 (last amended October 6, 2001) shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analyses shall be conducted in accordance with EPA Method 1631E, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See Attachment A, *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results. Compliance with the monthly average will be based on the cumulative arithmetic mean of all mercury tests results that were

conducted utilizing sampling Methods 1669 and analysis Method 1631E on file with the Department for this facility.

#### 2. Sampling

Sampling for all parameters must be collected after the last treatment process prior to discharge to the receiving water. Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (C.F.R.) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 C.F.R. Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water. Samples that are analyzed by laboratories operated by waste discharge facilities licensed pursuant to Waste Discharge Licenses 38 M.R.S. § 413 are subject to the provisions and restrictions of Maine Comprehensive and Limited Environmental Laboratory Certification Rules, 10-144 CMR 263 (last amended April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 C.F.R. part 136 or as specified in this permit, all results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report.

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

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

#### 3. 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 for 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 for 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 for 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 MEDEP)

The treatment facility must be operated by a person holding a minimum of a **Grade II** certificate or higher (or Registered Maine Professional Engineer) pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S., Sections 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 the terms and conditions of this permit and only from the outfall(s) listed in Part 1.B.1. Discharges of waste water from any other point sources, including sanitary sewer overflows (SSOs) are not authorized under this permit, and shall be reported in accordance with Part D.1.e of the Standard Conditions 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) shall not pass through the POTW or interfere with the operation or performance of the works.

#### G. WET WEATHER FLOW MANAGEMENT PLAN

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

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

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

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

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

By December 31 of each year and within 90 days of any process changes or minor equipment upgrades [PCS Code 09699], the permittee must evaluate and modify the O&M

Plan including site plan(s) and schematic(s) for the waste water treatment facility to ensure that it is up-to-date. The O&M Plan shall be kept on-site at all times and made available to Department and EPA personnel upon request.

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

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

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

#### I. OPERATION AND MAINTENANCE OF THE 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. Provisions to meet this requirement must be described in the O&M Plan required in Section H, above.

#### 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. Provisions to meet this requirement must be described in the O&M Plan required in Section H, above.

#### 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 and high flow related violations of the wastewater treatment plant's effluent limitations, or excessive I/I.

#### 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 must 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; and
- 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 CMR 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 requirement.

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

#### K. SLUDGE AND/OR SEPTAGE USE/DISPOSAL

- 1. The permittee must comply with all existing federal and state laws and regulations that apply to sludge and/or septage use and disposal practices, including EPA regulations promulgated at 40 C.F.R. Part 503.
- 2. If both state and federal requirements apply to the permittee's septage use and/or disposal practices, the permittee must comply with the more stringent of the applicable requirements.
- 3. The permittee must submit an annual report containing the information specified in the 40 C.F.R. Part 503 requirements. Reports shall 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 Maine NPDES permit holders to submit monitoring results obtained during the previous month on an electronic discharge monitoring report to the regulatory agency utilizing the USEPA electronic system.

- 1. Electronic DMRs submitted using the USEPA CDX system, must be:
  - a. Submitted by a facility-authorized signatory; and
  - b. Submitted no later than midnight on the 15th day of the month following the completed reporting period.
- 2. Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP Toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email.
- 3. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your CDX submittal will suffice. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.
- 4. Any verbal reports or verbal notifications, if required in Parts I and/or II of this permit, must be made to EPA. This includes verbal reports and notifications which require reporting within 24 hours. (As examples, see EPA Standard Conditions, Part II.B.4.c. (2), Part II.B.5.c. (3), and Part II.D.1.e.) Verbal reports and verbal notifications shall be made to EPA'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 Part I of this permitting action, additional site-specific information or any other pertinent information or test result obtained during the term of this permit, the Department may, at any time, and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded; (2) require additional monitoring if results on file are inconclusive; or (3) change the monitoring requirements and/or limitations based on new information.

## MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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#### MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

#### 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).

## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- **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

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### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

- (b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.
- (c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.
- (d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.
- (e) The permittee shall install flow measuring facilities of a design approved by the Department.
- (f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.
- **2. Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- **3.** Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- **4. Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

## 5. Bypasses.

- (a) Definitions.
  - (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
  - (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.
- (c) Notice.
  - (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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# STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

(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.

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#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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## 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.

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#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

# D. REPORTING REQUIREMENTS

# 1. Reporting requirements.

- (a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
  - (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).
  - (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.
- (d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
  - (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.
  - (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.
  - (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.
- (e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (f) Twenty-four hour reporting.
  - (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

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#### STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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).

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## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- (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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## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

- **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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## STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

**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.

# MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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

# NPDES PART II STANDARD CONDITIONS (April 26, 2018)

# 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

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

- (d) False Statement. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
- (2) Civil Penalties. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).
- (3) Administrative Penalties. The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty as follows:
  - (a) Class I Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act, the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).
  - (b) Class II Penalty. Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act the 2015 amendments to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461 note, and 40 C.F.R. Part 19. See Pub. L.114-74, Section 701 (Nov. 2, 2015); 83 Fed. Reg. 1190 (January 10, 2018).

#### 2. Permit Actions

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

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condition.

## 3. Duty to Provide Information

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

## 4. Oil and Hazardous Substance Liability

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

## 5. Property Rights

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

### 6. Confidentiality of Information

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

## 7. Duty to Reapply

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

#### 8. State Authorities

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

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

# 9. Other Laws

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

## B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

# 1. Proper Operation and Maintenance

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

## 2. Need to Halt or Reduce Not a Defense

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

## 3. Duty to Mitigate

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

#### 4. Bypass

#### a. Definitions

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

#### c. Notice

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- (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

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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

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

### 2. Inspection and Entry

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

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

# D. REPORTING REQUIREMENTS

# 1. Reporting Requirements

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

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- 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

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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

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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

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"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

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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

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Agency.

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

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

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

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

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

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

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

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

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

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

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

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

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

### *Municipality*

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

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

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

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

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

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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  $25^{\circ}$  Centigrade or measured at another temperature and then converted to an equivalent value at  $25^{\circ}$  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

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Atomic Energy Act of 1954, as amended (42 U.S

(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

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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

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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.

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

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

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

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

# 2. Commonly Used Abbreviations

BOD Five-day biochemical oxygen demand unless otherwise specified

CBOD Carbonaceous BOD

CFS Cubic feet per second

COD Chemical oxygen demand

Chlorine

Cl<sub>2</sub> 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

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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

Surface-active agent

Temp. °C Temperature in degrees Centigrade

Temp. °F Temperature in degrees Fahrenheit

TOC Total organic carbon

Total P Total phosphorus

TSS or NFR Total suspended solids or total nonfilterable residue

Turb. or Turbidity Turbidity measured by the Nephelometric Method (NTU)

μg/L Microgram(s) per liter

WET "Whole effluent toxicity"

ZID Zone of Initial Dilution

# Maine Department of Environmental Protection

# **Effluent Mercury Test Report**

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

DEPLW 0112-B2007 Printed 1/22/2009

## **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: ME0100901

LICENSE NUMBER: W002575-6B-E-R

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

NAME AND ADDRESS OF APPLICANT:

Northport Village Corporation 813 Shore Rd. Northport, Maine 04849

COUNTY: Waldo

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Northport Village Corporation Wastewater Treatment Facility Pleasant Street, Northport, Maine

RECEIVING WATER Belfast Bay

CLASSIFICATION: Class SB

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Mr. Richard McElhaney Superintendent of Utilities Northport Village Corporation (207) 724-3740

E-mail: dickmcelhaney@tds.net

# FACT SHEET

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- Appendix A Outfall Location Map
- Appendix B Treatment Schematic
- Appendix C Discharge Monitoring Report Data
- Appendix D Statement for Reduced/Waived Toxics Testing

# 1. APPLICATION SUMMARY

# a. Application

The Northport Village Corporation (NVC) is a quasi-municipal discharger as defined by 40 C.F.R. § 122.2. NVC has applied for renewal of a combined National Pollutant Discharge Elimination System (NPDES) permit #ME0100901 and Maine Waste Discharge License (WDL) # W002575 that was issued on June 29, 2004 and expired on June 29, 2009. The 2004 Permit is based on a Section 301(h) variance of secondary treatment and authorized the discharge of up to a monthly average flow of 0.063 million gallons per day (MGD) of primary treated sanitary waste water to Belfast Bay, a Class SB water, in Northport, Maine. See Appendix A of this Fact Sheet for a location map.

# b. Source Description

Sanitary waste water is generated by approximately 238 residential users in Northport Village<sup>1</sup>. The facility does not receive any flow from industrial sources. The wastewater collection system consists of approximately three (3) miles of 4, 6, 8 and 10-inch ceramic and polyvinylchloride (PVC) and vitrified clay (VC) piping. The southern portion of the sanitary collection area has 8-inch sewers that run to a pump station and wastewater is then pumped in a 4-inch force main to the gravity collection system. The location of the treatment plant allows the remaining influent wastewater flow to be conveyed by gravity to the headworks.

# c. Wastewater Treatment

The headworks consist of a collection manhole which intercepts flow from two (2) 10-inch PVC pipes. Flow is then designed to discharge through two (2) V-notch weirs which flow to three (3) trains of septic tanks. Each train consists of four (4) 8,000 gallon settling tanks, providing a total volume of 96,000 gallons. Sludge is removed and disposed of off-site by a contractor. Following the septic tanks, the flow recombines in a metering manhole that includes a 30-degree V-notch weir used for flow measurement. Flow is recorded continuously and totalized on a circular flow chart.

Sodium hypochlorite is added at the metering manhole using a diaphragm metering pump. The pump speed is automatically adjusted to match the flow measured by the 30-degree V-notch weir. The flow then enters a buried, baffled, chlorine contact tank with a capacity of about 8,000 gallons. After the chlorine contact tank, the flow enters a dechlorination manhole where sodium bisulfite is added, and then an effluent manhole prior to discharge to the outfall.

In the summer of 2011, the outfall pipe was replaced with a 12" diameter high density polyethylene (HDPE) pipe that extends out into the receiving water. See Appendix B of this Fact Sheet for a schematic of the treatment process.

<sup>&</sup>lt;sup>1</sup> March 13, 2009 NPDES Reapplication

#### 2. PERMIT SUMMARY

# a. Regulatory

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

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

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

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

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

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

# b. <u>History</u><sup>2</sup>

December 27, 1978 - The Department issued waste discharge license #W002575 authorizing the discharge of 64,000 gallons per day of untreated sanitary wastewaters to the tidewaters of Northport. The license also contained an effluent limitations page with secondary treatment requirements once a treatment facility was constructed.

December 28, 1982 - The NVC submitted a final application to the U.S. Environmental Protection Agency (EPA) for a variance from secondary treatment requirements (primary treatment only) pursuant to Section 301(h) of the Clean Water Act (CWA).

September 14, 1983 – The Department renewed waste discharge license WDL #W002575 with the same limitations and conditions contained in the December 27, 1978 license.

December 2, 1985 - The EPA approved the request for a variance from secondary treatment requirements.

March 31, 1986 - The Department issued a certification, pursuant to Section 401 of the CWA, of the public notice draft National Pollutant Discharge Elimination System (NPDES) permit #ME0100901. The EPA issued NPDES permit #ME0100901 for NVC's discharge.

July 13, 1987 – The Department issued WDL #002575-45-A-R that authorized the discharge of untreated wastewaters to the tidewaters of Northport via three (3) outfalls. The license also included two (2) seasonal effluent limitations pages based on primary treatment of the wastewater at a rate of 0.056 MGD.

July 20, 1990 – The Department issued WDL modification #W002575-59-B-M that increased the flow from 0.056 MGD to 0.063 MGD. The modification also indicated that the three outfall pipes identified in the July 13, 1987 license were combined to discharge through one outfall pipe at Ruggles Park. Sampling requirements for the winter season were reduced.

January 19, 1996 - The Department issued WDL #W02575-59-C-R that authorized the discharge of primary treated wastewater to the tidewaters of Northport via one (1) outfall.

Fall 1999 – NVC completed a study of the sewer collection system to identify problem areas and prioritize infiltration and inflow (I/I) removal efforts. The study recommended that sewer rehabilitation work be performed in two phases. The first phase of the sewer collection I/I removal efforts were completed in the fall of 2003.

August 26, 2003 – The NVC entered into a Consent Agreement with the Maine DEP to address operations and maintenance issues at the facility. The Consent Agreement (CA) required NVC to implement corrective actions to address a malfunctioning chlorination system, a broken discharge pipe, and infiltration and inflow problems. The CA also required NVC to conduct

<sup>&</sup>lt;sup>2</sup> This section is included to provide useful historical background information for this permit. In some cases, the supporting documentation for this background information may no longer be available from the municipality, state and/or EPA.

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stage I and II facilities planning for a new wastewater treatment facility and, if applicable and in accordance with the CA, commence construction by November 1, 2007.

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June 29, 2004 – The EPA and Department issued combination NPDES permit #ME0100901/WDL #W002575-6B-D-R for a five-year term.

March 13, 2009 – The NVC submitted a timely and complete application to the Department to renew the 6/29/04 NPDES permit/WDL.

February 11, 2014 – EPA sent NVC a 301(h) application/questionnaire package.

June 2, 2014 - NVC submitted a current 301(h) 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., Section 420 and Department rule 06-096 CMR Chapter 530, Surface Water Toxics Control Program, require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, Surface Water Quality Criteria for Toxic Pollutants, and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

Maine law, 38 M.R.S. Section 469 classifies the receiving water at the point of discharge as Class SB water. Maine water quality standards at 38 M.R.S., Section 465-B(2) contain the designated uses and specific water quality criteria for Class SB waters. Designated uses are identified as "recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial processes and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life."

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

#### 4. RECEIVING WATER QUALITY CONDITIONS

Belfast 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 15 feet<sup>3</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

<sup>&</sup>lt;sup>3</sup> https://tidesandcurrents.noaa.gov/stationhome.html?id

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, 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.<sup>4</sup>

# a. Shellfishing

NVC's waste water treatment facility discharges to a shellfish harvesting area that the Maine Department of Marine Resources (MEDMR) has designated as shellfish Area C32, Belfast Bay and just east of the discharge is DMR shellfish closure area C31B Great Spruce Head to Kellys Cove, Northport.

DMR's Shellfish Closure Notice for Area C32, Belfast Bay of January 3, 2000, is quoted as follows:

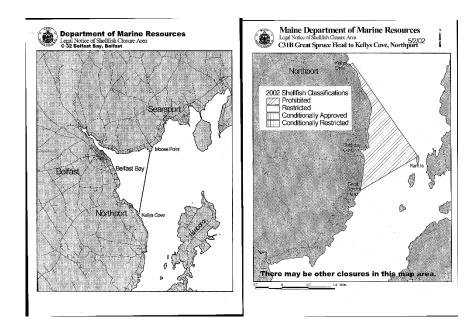
Effective immediately, because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels taken from the shores, flats and waters of Belfast Bay, Waldo County, westerly of a line drawn from the most southern tip of Moose Point, Searsport, southerly to a red painted post located on the northernmost point on the south side of Kelly Cove, Northport.

DMR's Shellfish Closure Notice for Area C31B, Great Spruce Head to Kellys Cove of May 2, 2002, Northport, is quoted as follows:

Effective immediately, because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters or mussels from the shores, flats and waters of West Penobscot Bay, westerly (in-shore) of a line beginning at the eastern tip of Great Spruce Head in the town of Northport; and continuing northeasterly to the norther end of Ram Island, Islesboro; then continuing northwesterly (about 5,300 yards) to a red painted post located on the northernmost point on the south side of Kellys Cove, Northport. This red post also serves as the southern boundary of Closed Area No. 32, Belfast Bay.

<sup>&</sup>lt;sup>4</sup> Maine DEP 2016 Integrated Report Appendices, Page 185

#### DMR's Shellfish Closure Notice for Areas C32 and C31B.



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

#### b. Biological Monitoring

In accordance with federal regulation, municipalities with CWA Section 301(h) waivers from secondary treatment "must have a monitoring program that is designed to provide data to evaluate the impact of the modified discharge on the marine biota, demonstrate compliance with applicable water quality standards or water quality criteria, as applicable, and measure toxic substances in the discharge" (see 40 C.F.R. § 125.63(a)(1)(i)). The first round of Maine 301(h) waiver permits<sup>5</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

<sup>&</sup>lt;sup>5</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.

(h) participating facilities. <sup>6</sup>" One of the permittees, Boothbay Harbor, had been in operation for 22 years at the time of the survey. The biologists found no solids deposition within the outfall zone of initial dilution (ZID) or the control sites. They found no discernable difference between bottom dwelling organisms, flora and fauna within the ZID and again at control sites. The biologist found the same to be true in each of the four facilities surveyed. The divers also observed that, due to its relatively low density, the effluent rose toward the surface of the ocean and was quickly dispersed by longshore currents.

However, after surveying the sites of four facility outfalls, by letter dated February 17, 1995 from the EPA Regional Administrator, the EPA agreed with the MEDEP that further SCUBA inspections of 301(h) outfalls was too dangerous due to the swift currents generally found in these receiving waters. David Courtemanch, the MEDEP Senior Biologist and diver with the most experience in potential impact of the 301(h) facilities in Maine concluded that "any monitoring beyond effluent sampling is useless, wasteful, and of no environmental benefit.<sup>7</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>8</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 biological monitoring. This decision is consistent with 40 C.F.R. § 125.63(a)(1)(i)(B) which states that the monitoring requirements are "limited to include only those scientific investigations necessary to study the effects of the proposed discharge" and 40 C.F.R. § 125.63(b)(1) which specifies that monitoring is required to the extent practicable.

# 5. WAIVER OF TREATMENT REQUIREMENTS

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

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

<sup>&</sup>lt;sup>6</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>7</sup> Ibid

<sup>&</sup>lt;sup>8</sup> Marine Pollution Bulletin Journal (101(2015)174–181): <u>Response of benthos to ocean outfall discharges: does a general pattern exist?</u> A. Puente, R.J. Diaz: <u>www.elsevier.com/locate/marpolbul</u>

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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 NVC on December 2, 1985, based upon the following findings:

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

Because all the prior 301(h) conditions have been maintained and because there has been no new or substantially increased discharge from the permittee's facility, EPA proposes, through the reissuance of the Northport 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>9</sup> Following the meeting, EPA sent a detailed letter with supporting materials to NMFS concerning all eight municipal permits with

<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.

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>10</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>11</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.

### 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.

<sup>&</sup>lt;sup>10</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 I.

<sup>&</sup>lt;sup>11</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 I.

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>12</sup> The initial meeting was followed by a letter from EPA to Louis A. Chiarella, Assistant Regional Administrator, Habitat Conservation Division, NMFS. <sup>13</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.

### b. EFH Species

The discharge location (N 44° 22' 53.87" N, W 68° 57' 55.63" 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.

**Table 1 – EFH Designations** 

Boundary	North	Ea	st	South		West	,
Coordinates	44° 20.0 N	689	° 50.0 W	44° 10.0	44° 10.0 N		00.0 W
Species	Eggs	Larvae	Juveni	iles	Adults		
Atlantic salmon (Salm			X		X		
Atlantic cod (Gadus n	Atlantic cod (Gadus morhua)				X		X
haddock (Melanogran	nmus aeglefinus)						X
pollock (Pollachius vi	irens)				X		
whiting (Merluccius b			X		X		
red hake (Urophycis c			X		X		

<sup>&</sup>lt;sup>12</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>13</sup> Letter from Doug Corb, EPA Region I Municipal Permits Branch to Louis A. Chiarella, Assistant Regional Administrator, Habitat Conservation Division, NMFS., Dated June 29, 2017.

white hake (Urophycis tenuis)			X	X
winter flounder (Pseudopleuronectes americanus)	X	X	X	X
yellowtail flounder (Limanda ferruginea)	X	X		
windowpane flounder (Scophthalmus aquosus)	X	X	X	X
American plaice (Hippoglossoides platessoides)	X	X	X	X
ocean pout (Macrozoarces americanus)	X	X	X	X
Atlantic halibut (Hippoglossus hippoglossus)				
Atlantic sea scallop (Placopecten magellanicus)	X	X	X	X
Atlantic sea herring (Clupea harengus)		X	X	X
bluefish (Pomatomus saltatrix)			X	X
Atlantic mackerel (Scomber scombrus)			X	X
bluefin tuna (Thunnus thynnus)				X

#### 8. EFFLUENT LIMITATIONS

# a. Effluent Flow

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

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

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

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

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

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

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

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

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

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

The 2004 permit established a flow limitation of 0.063 million gallons per day (MGD). The limit was originally established by the EPA on December 2, 1985 when the waiver was granted. The 12-monthly rolling average flow discharged from the facility from 2013 to 2018 ranged from 0.001 to 0.035 MGD, well below the flow limit. The limitation is being carried forward in this permitting action but is being expressed as 63,000 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.

Modeling<sup>14</sup> has determined that at the full permitted flow of 63,000 gpd, the discharge from the NVC waste water treatment facility will be diluted by the following factors:

Acute = 480:1 Chronic = 871:1 Harmonic mean = 2,613:1

<sup>14</sup> NVC 301(h) Modified NPDES Reissuance Questionnaire for small discharges in Maine, May 27, 1914

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

A new outfall pipe was constructed during the summer of 2011. The outfall is a 12" diameter high-density polyethylene (HDPE) pipe that extends 760 feet from the shoreline and discharges at a depth of 34 feet, mean low water, in Belfast Bay. There are no ports or diffusers on the outfall, but the end of the outfall pipe angles up 90 degrees.

# c. Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS)

Federal regulations state that primary or equivalent treatment means treatment by screening, sedimentation, and skimming adequate to remove at least thirty percent (30%) of the BOD and 30% of the TSS material in the treatment works influent (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 2004 Permit included requirements for 30% BOD removal and 50% TSS removal as well as calculated mass and concentration limits for BOD and TSS. The effluent limits from the 2004 Permit and the effluent data for 2013 to 2018 are provided in Appendix C. As can be seen from the data, the facility has met its BOD and TSS effluent limits except for one month, September 2014, when the BOD limits were exceeded.

The percent removal requirements were established in the 2004 Permit and are being carried forward. Percent removal is calculated as follows:

Percent removal =  $\underline{\text{((ave monthly influent concentration)}} \times 100$ 

The unconventional design of the NVC treatment system does not allow for consistent influent sampling for BOD or TSS. There is no screen, bar rack, comminutor, grit chamber or sump ahead of the influent manhole or septic tanks, thus eliminating normal influent sampling locations. Often there is little to no influent flow (less than 1 gpm) in the manhole to sample. In the absence of influent sampling for BOD and TSS, EPA established an assumed monthly average influent concentration of 290 mg/L for both in the 2004 permit. The assumed influent concentration value is 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>15</sup>

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

using the flow limit of 63,000 gpd (0.063 MGD),

<sup>&</sup>lt;sup>15</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.

BOD: 290 mg/L - [(290 mg/L)(0.30)] = 203 mg/L(203 mg/L)(8.34)(0.063 MGD) = 107 lbs/day

TSS: 290 mg/L - [(290 mg/L)(0.50)] = 145 mg/L(145 mg/L)(8.34)(0.063 MGD) = 76 lbs/day

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

#### d. Settleable Solids

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

The 2004 permit established monthly average and daily maximum concentration reporting requirements for settleable solids with a once per week monitoring frequency. A review of the DMR data from 2013 to 2018 indicates that the monthly average and daily maximum concentrations have fallen within the optimum range of 0.1 to 0.4 ml/L. A full monthly monitoring data set for 2013 to 2018 is provided in Appendix C.

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

### e. Enterococci Bacteria and Fecal Coliform Bacteria

Specific types of non-pathogenic bacteria are used as indicator organisms, or surrogates, for waterborne pathogens (bacteria, viruses, etc.) which enter surface waters from a variety of sources, including human sewage and the feces of warm-blooded wildlife. These pathogens can pose a risk to human health due to gastrointestinal illness through different exposure routes, including contact with and ingestion of recreational waters, ingestion of drinking water, and consumption of shellfish. <sup>16</sup>

#### Enterococci

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. 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

<sup>16</sup> Maine Statewide Bacteria TMDL (Total Maximum Daily Loads) August 2009 Report # DEPLW-1002.

monthly geometric mean of 8 cfu/100 ml and a maximum daily limit of 54 cfu/100 ml with weekly monitoring. The limits apply seasonally from April 15th through October 31<sup>st</sup>.

#### 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 2004 Permit to average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/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 2004 Permit applied the fecal coliform limits seasonally (May 15 – September 30). As can be seen from the summary in Table 2, the permittee has been consistently meeting these effluent limits. A full monthly monitoring data set for 2013 to 2018 is provided in Appendix C.

Table 2 - Summary of Effluent Fecal Coliform Data (2013-2018)

	Monthly Ave (cfu/100 ml)	Daily Max (cfu/100 ml)
Effluent Limit	15	50
Minimum	1	1
Maximum	3.16	10
Average	1.1	1.3

The Maine Department of Marine Resources (MEDMR) regulates shellfishing within the state. MEDMR sets shellfish closure areas around all outfalls discharging sanitary wastewater to protect shellfish beds in case of failure of disinfection systems. Even with the outfall closure areas, the permit limits must still protect the designated uses <sup>17</sup> of class SB waters, which include *harvesting of shellfish*. <sup>18</sup> The MEDMR Closure Orders, Number C31-B and C32 found on page 7 of the Fact Sheet do not remove the designated use of *harvesting of shellfish*, nor EPA's responsibility to set fecal coliform limits in the draft permit to protect that use.

The Food and Drug Administration (FDA) periodically updates the shellfish standards. The most recent revision is the <u>National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish, 2013 Revision</u>. EPA will apply the same bacteriological standards from

<sup>&</sup>lt;sup>17</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>18</sup> 38 M.R.S. § 465-B(2). Standards for classification of estuarine and marine waters-Class SB waters.

this Guidance Document, as used by the MEDMR in the protection shellfish resources <sup>19</sup> as permit limits. These specify that:

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>20</sup> (mTEC) of: 31 CFU per 100 ml for a MF [membrane filter] (mTEC) test.

The Draft Permit includes monthly average and daily maximum limits of 14 cfu/100 ml and 31 cfu/100 ml, respectively. These limits are consistent with the recommendations in the 2013 National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish. The monitoring frequency requirement of once per week 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 MEDMR 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. Limits on total residual chlorine are specified to ensure attainment of the in-stream water quality criteria for chlorine. The instream chlorine criteria are defined in National Recommended Water Quality Criteria: 2002, EPA 822R-02-047 (November 2002), as adopted by the Maine DEP into the Chapter 584: Surface Water Quality Criteria for Toxic Pollutants<sup>21</sup>. The criteria establish that the total residual chlorine in the receiving water should not exceed 7.5  $\mu$ g/l (chronic) and 13  $\mu$ g/l (acute). Maine also applies a technology-based best practicable treatment (BPT) limit of 1.0 mg/L.

The 2004 Permit established a water quality based daily maximum limitation of 0.052 mg/L based on a dilution of 4:1 and with monitoring frequency of 1/Day. During the last five years, TRC concentrations in the effluent ranged from 0.01 to 0.04 mg/L, well below the TRC effluent limit. A full monthly monitoring data set for 2013 to 2018 is provided in Appendix C.

Since the last permit was issued, the available dilution is greatly enhanced with the 2011 outfall extension into deeper water. Therefore, revised end-of-pipe water quality-based concentration thresholds can be calculated as shown below.

Parameter	Acute	Chronic	Acute	Chronic	Acute	Chronic
	Criteria	Criteria	Dilution	Dilution	Limit	Limit
Chlorine	13 μg/L	7.5 μg/L	871:1	480:1	11.3 mg/L	3.6 mg/L

Example calculation: Acute 0.013 mg/L (871) = 11.3 mg/L

<sup>&</sup>lt;sup>19</sup> 2013 National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish 2013 Revision section 02.

<sup>&</sup>lt;sup>20</sup> A membrane filtration test method using Modified membrane-Thermotolerant Escherichia coli or mTEC agar or medium.

<sup>&</sup>lt;sup>21</sup> Ch. 584, Surface Water Quality Criteria for Toxic Pollutants <a href="http://maine.gov/dep/water/rules/index.html">http://maine.gov/dep/water/rules/index.html</a>

Chronic 0.0075 mg/L (480) = 3.6 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 current Maximum daily TRC limit is subject to anti-backsliding provisions found in Section 402(o) of the Clean Water Act. The term anti-backsliding refers to statutory and regulatory provisions that prohibit the renewal, reissuance, or modification of an existing NPDES permit that contains effluent limitations, permit conditions, or standards less stringent than those established in the previous permit.

The 0.3 mg/l maximum daily limit is carried forward during this permit reissuance to be consistent with Maine CWA Section 401 permit certification requirements<sup>22</sup>. The monitoring frequency remains daily.

### g. pH

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

The 2004 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 5 per week. A review of the DMR data for the period 2013 to 2018 indicates that the pH of the effluent ranged from 6.6 to 7.4 standard units, well within the effluent limits. A full monthly monitoring data set for 2013 to 2018 is provided in Appendix C.

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 Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

<sup>&</sup>lt;sup>22</sup> Maine DEP Memorandum from John Moulton (DEP) to EPA, September 24, 1992

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

All dischargers having waived or reduced testing must file statements with the Department on or before December 31 of each year describing the following.

- a) Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
- b) Changes in the operation of the treatment works that may increase the toxicity of the discharge; and
- c) Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge.

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. A sample of the form for this certification is provided in Appendix D.

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 Department Rule, Chapter 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. Mercury

On May 23, 2000, pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and *Waste discharge licenses*, 38 M.R.S. § 413 and Interim Effluent Limitations and Controls for the Discharge of Mercury, 06-096 CMR 519 (last amended October 6, 2001), the MEDEP issued a Notice of Interim Limits for the Discharge of Mercury to the permittee, administratively modifying WDL # W02575 by establishing interim average and maximum effluent concentration limits of 33.4 nanograms per liter (ng/L) and 50.1 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 August 2004 to October 2017 indicates mercury test results have ranged from 2.7 ng/L to 39.7 ng/L with an arithmetic mean (n=24) of 19.38 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 sludge under Department Regulations Chapter 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.

The septic tanks are pumped out twice per year in the spring and again in the fall by Moore's Septic. Approximately 35,000 gallons per year is pumped out by Moore's Septic Inc., after which it is taken to their off-site solids processing center. It is then dewatered for either composting and/or land spreading. The filtrate from their dewatering process is spray irrigated for disposal.

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

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>23</sup>

NVC reviewed data from 2002-2013 which demonstrates an 80% reduction of I&I related to projects undertaken to replace old and leaky lines along 1.5 miles of the collection system. There remains some inflow during extreme rain events but not sufficient cause an exceedance of the permitted effluent flow limits.

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 Island Advantages Newspaper on or about December 1, 2007 consistent with Maine application requirements.

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

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 13 below, and to the Department at the address shown in Section 12 below. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing.

Public hearings may be held after at least thirty 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 draft permit, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

<sup>&</sup>lt;sup>23</sup> Nonexcessive (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day. 40 CFR §125.60(c)(iii).

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

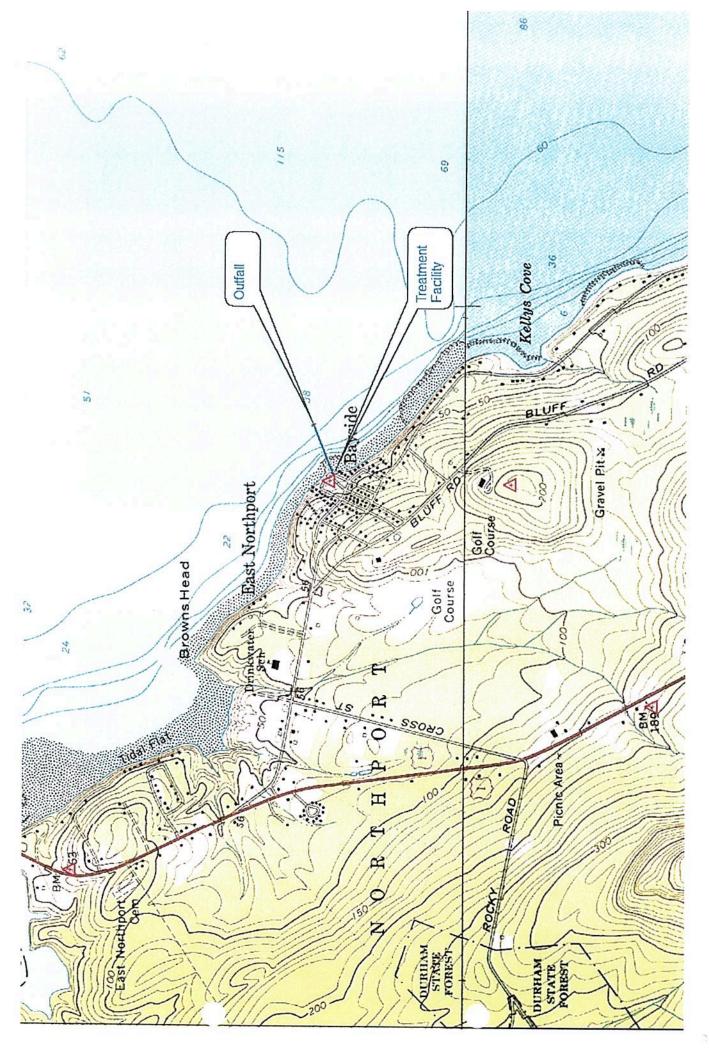
Additional information concerning this permitting action may be obtained from and written comments should be directed to:

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

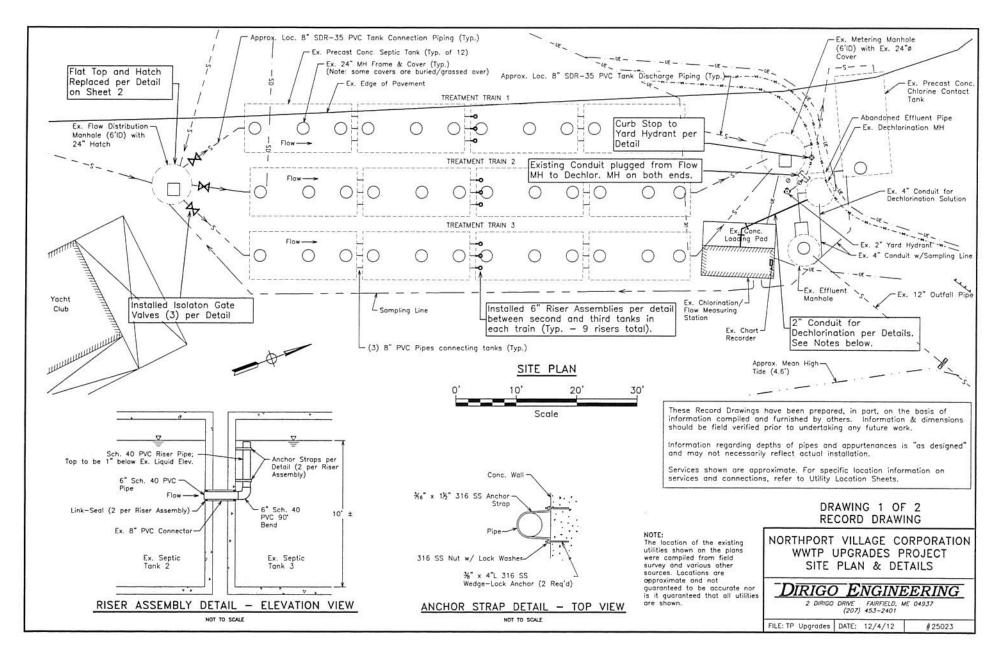
Doug Corb U.S. Environmental Protection Agency Mail Code – OEP06-4 5 Post Office Square – Suite 100 Boston, MA 02109-3912 Phone: 617-918-1565

Email: corb.doug@epa.gov



Outfall Location Map - Northport Village Corporation Wastewater Plant

#### APPENDIX B





	Flow	BOD₅	BOD₅	BOD <sub>5</sub>	BOD <sub>5</sub>	TSS	TSS	TSS	TSS
Monitoring	Monthly	Monthly	Monthly	-		Monthly	Monthly		
Period End	Average	Ave	Ave	Daily Max	Daily Max	Ave	Ave	Daily Max	Daily Max
Date:	(MGD)	(lb/day)	(mg/L)	(lb/day)	(mg/L)	(mg/L)	(lb/day)	(lb/day)	(mg/L)
Effluent Limit	0.063	106.7	203	Report	Report	145	76.2	Report	Report
Minimum	0.001	1.1	15.3	1.8	. 22	5.7	0.3	0.4	6
Maximum	0.035	30.2	292	88	420	65	15.1	65	121
Average	0.013	7.2	85.9	13.0	125	26.9	2.5	4.8	36
08/31/2013	0.010	11.2	140	15.2	150	49	4	6.4	67
09/30/2013	0.005	3.9	100	6.9	130	43	1.7	3	56
10/31/2013	0.002	1.7	103	2	150	28	0.5	0.6	
11/30/2013	0.011	1.9	89	2.6	150	24	0.5		
12/31/2013	0.009	6	42	19.5	70	11	1	2.4	
01/31/2014	0.026	1.5	32	1.8		13	1.7	5	
02/28/2014	0.005	1.6	52	2	61	23	0.7	1	26
03/31/2014	0.0122	NODI: H	NODI: H	NODI: H	NODI: H	19	1.3		
04/30/2014	0.027	3.6	29.8	6.5		9.4	2		
05/31/2014	0.012	7	71.5	15.8		20	1.5		
06/30/2014	0.0118	5.8	75.2	10.7	82	57.2	4.6		121
07/31/2014	0.023	23	141	32	180	38	6		
08/31/2014	0.015	30.2	194	53.9	260		4.3		
09/30/2014	0.006	11.3	292	21.8		24	0.9		
10/31/2014	0.011	5.1	125	9.1	310	21	1.1	2.8	
11/30/2014	0.016	7	44.5	12.7	66	11.5	2.1	5	
12/31/2014	0.028	5.3	18.6	13.6		8.8	2.7		
01/31/2015	0.005	2.5	95	3.2	140	16	0.6		
02/28/2015	0.003	1.6	81	1.8		6.5	0.3		
03/31/2015	0.006		72	2.7					
04/30/2015	0.035	3.7	16	5.5		9.7	2		
05/31/2015	0.005	3.9	127	5		36	1.1		
06/30/2015	0.008	12.3	195	23		32	1.9		37
07/31/2015	0.015	20.5	178	24.9	190	55	6.3		
08/31/2015	0.015		160	27.9			6.9		
09/30/2015	0.016		113.4	88		39.2	15.1		
10/31/2015	0.013		81.8	9.1	110 71	33 18.5	1.9		
11/30/2015	0.018 0.019		50 86	16.1 12.8		17.6	1.9 1.8		
12/31/2015 01/31/2016	0.019		54	4.2	75		1.8		
02/29/2016	0.016		36.5	19.1	96		3		19
03/31/2016	0.028	5.4	21	13.5			2		
04/30/2016	0.022	3.3	41	4.8		12	1.1		
05/31/2016	0.017		103	6.2	160	27	1.1		
06/30/2016	0.008		68	6.8			2.3		
07/31/2016	0.013	16.3	124	21.6			6.3		
08/31/2016	0.017		155	21.0					
UO/3 I/ZU IO	0.014	15.7	105	Z1	180	49	4.9	ს. ა	J 5/

# Fact Sheet Appendix D - Statement for Reduced/Waived Toxics Testing

# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

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?		
С	OMMENTS:		
N	ame (printed):		- <del></del>
Si	gnature:		

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 1				

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

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

	I					1		ı	
	Flow	BOD <sub>5</sub>	BOD <sub>5</sub>	BOD <sub>5</sub>	BOD <sub>5</sub>	TSS	TSS	TSS	TSS
Monitoring	Monthly	Monthly	Monthly	3	3	Monthly	Monthly		
Period End	Average	Ave	Ave	Daily Max	Daily Max	Ave	Ave	Daily Max	Daily Max
Date:	(MGD)	(lb/day)	(mg/L)	(lb/day)	(mg/L)	(mg/L)	(lb/day)	(lb/day)	(mg/L)
09/30/2016	0.008	8.3	148	10.3	190	48	2.8	4	60
10/31/2016	0.004	2.6	80	6.5	130	32	1.1	2	40
11/30/2016	0.001	13.7	66	49.9	98	28	4.3	14.3	31
12/31/2016	0.018	3.4	25	10.2	41	11	1.5	3.7	14
01/31/2017	0.021	5.1	16	9.1	29	5.7	2	2.9	6
02/28/2017	0.009	1.1	37	1.9	47	18	0.6	1.3	31
03/31/2017	0.009	3.4	35	6.2	48	12	1.2	2	16
04/30/2017	0.019	5.3	22.5	11.5	28	9.2	2	2.9	11
05/31/2017	0.024	3.3	31	4.2	64	9	1	1.4	17
06/30/2017	0.001	6.8	105	9.2	190	32	2.1	3.2	48
07/31/2017	0.012	13.2	143	15.9	180	52	4.9	5.5	58
08/31/2017	0.0104	13.9	171	16.9	260	55	4.5	5.5	65
09/30/2017	0.005	3	73	3.9	81	47	2	3.1	53
10/31/2017	0.003	2.2	88	4.3	100	42	1.1	2.5	53
11/30/2017	0.003	1.9	80	4.3	98	28	0.6	1.2	34
12/31/2017	0.008	5.4	47	9.6	64	15	1.7	3.5	20
01/31/2018	0.021	1.8	35	3.7	87	14	0.9	2.2	27
02/28/2018	0.017	2.8	18	5.7	26	7	1.2	2.2	9
03/31/2018	0.022	2.1	21	2.8	41	7.2	0.9	1.4	8.4
04/30/2018	0.027	3.4	15.3	7.7	25	5.9	1.4	2.9	9.4
05/31/2018	0.006	2.3	61	3.4	95	22	0.8	1.2	34
06/30/2018	0.0063	4.4	113	7	140	45	1.8	3.1	62
07/31/2018	0.011	12.2	145	14.8	160	54	4.5	5.4	57
08/31/2018	0.011	15.3	165	24.8	240	65	5.9	9.1	88
09/30/2018	0.008	5.2	93	6.9	140	39	2.3	2.9	49

									Total
	DOD	TSS	Settleable Solids	Settleable Solids	mU	mU	Fecal Coliform	Fecal Coliform	Residual Chlorine
B# iti	BOD₅	133	Solius	Solius	рН	pН		Colliorin	Chiorine
Monitoring	%	0/	Daily May	Mandhli	Minimo	Massimassima	Monthly	Deily May	Daily May
Period End		% Bomovol		Monthly	Minimum	Maximum	•	Daily Max (#/100 ml)	Daily Max
Date:	Removal	Removal	(ml/L)	Ave (ml/L)	(SU)	(SU)	ml)	(#/ 100 1111)	(mg/L)
	≥ 30%	≥ 50%							
		Removal	•	Report	6	9			
Minimum	0.9	78	0.1	0.1	6.6	6.8		1	0.01
Maximum	94.7	98	0.4	0.2	7.0	7.4		10	
Average	70.3	90.5	0.1	0.1	6.8	7.1	1.1	1.3	
08/31/2013	51.7	83.1	0.2	0.1	6.8	7	1	1	0.02
09/30/2013	65	85	0.2	0.1	6.8	7	1	1	0.02
10/31/2013	65	90	0.2	0.1	6.8	7			
11/30/2013	69	92	0.1	0.1	6.8	7			
12/31/2013	86	96	0.1	0.1	6.8	7			
01/31/2014	89	95	0.1	0.1	6.9	7.2			
02/28/2014	82	92	0.1	0.1	7	7.2			
03/31/2014	NODI: H	93	0.1	0.1	7	7.4			
04/30/2014	89.7	96.8	0.1	0.1	7	7.3			
05/31/2014	75	93	0.1	0.1	6.9	7.2	1	1	
06/30/2014	74.1	80.3	0.1	0.1	6.9	7.2	1	1	0.02
07/31/2014	51.4	87	0.2	0.1	6.9	7.1	1	1	
08/31/2014	33	90	0.2	0.1	7	7.2	1	1	
09/30/2014	0.9	92	0.2	0.1	7	7.1	1	1	0.02
10/31/2014	57	93	0.1	0.1	6.9	7.1			
11/30/2014	84.7	96	0.1	0.1	7	7.2			
12/31/2014	93.6	97	0.1	0.1	7	7.2			
01/31/2015	67	94	0.1	0.1	7	7.2			
02/28/2015	72	94	0.1	0.1	7	7.2			
03/31/2015	75					7.3			
04/30/2015	94	97	0.1	0.1	6.9	7.2			
05/31/2015	38	81	0.1	0.1	7	7.2	3.16		
06/30/2015	33	89	0.1	0.1	7	7.2	1	1	0.02
07/31/2015	39	81	0.2	0.13		7.2	1	1	0.02
08/31/2015	44.8	81	0.2	0.15			1	1	
09/30/2015	61	87	0.2	0.1	6.8		1	1	0.02
10/31/2015	82	89	0.2	0.1	6.8	7			
11/30/2015	82.8	93.6	0.1	0.1	6.8				
12/31/2015	70	94	0.1	0.1	6.9				
01/31/2016	82	94	0.1	0.1	6.8	7.1			
02/29/2016	87	96	0.1	0.1	6.8	7.2			
03/31/2016	93	97	0.1	0.1	6.8	7			
04/30/2016	86	96	0.1	0.1	6.7	7			
05/31/2016	65	91	0.2	0.1	6.7	6.9		1	
06/30/2016	77	89	0.2	0.1	6.7	6.9		1	
07/31/2016	57	84	0.2	0.1	6.6	6.9		1	
08/31/2016	47	83	0.4	0.15	6.7	6.8	1	1	0.02

	BOD₅	TSS	Settleable Solids	Settleable Solids	рН	рН	Fecal Coliform	Fecal Coliform	Total Residual Chlorine
Monitoring Period End Date:	% Removal	% Removal	(ml/L)	Monthly Ave (ml/L)	Minimum (SU)	Maximum (SU)	Monthly Ave (#/100 ml)	Daily Max (#/100 ml)	Daily Max (mg/L)
09/30/2016	49	83	0.3	0.2	6.6	6.8	1	1	0.02
10/31/2016	72	89	0.2	0.1	6.7	7.1			
11/30/2016	77	90	0.1	0.1	6.7	7.1			
12/31/2016	91.3	96.3	0.1	0.1	6.8	7			
01/31/2017	94.4	98	0.1	0.1	6.6	7.1			
02/28/2017	87	94	0.1	0.1	6.7	7			
03/31/2017	88	96	0.1	0.1	6.6	6.9			
04/30/2017	92.2	96.8	0.1	0.1	6.6	7			
05/31/2017	89	97	0.1	0.1	6.7	7	1	1	0.02
06/30/2017	64	89	0.1	0.1	6.7	7	1	1	0.02
07/31/2017	51	82	0.2	0.1	6.8	7.1	1	1	0.02
08/31/2017	41	81	0.2	0.1	6.8	7.1	1	1	0.02
09/30/2017	75	84	0.2	0.14	6.7	7.1	1	1	0.02
10/31/2017	70	86	0.2	0.1	6.7	7.1			
11/30/2017	72	90	0.1	0.1	6.8	7.1			
12/31/2017	84	95	0.1	0.1	6.7	7			
01/31/2018	88	95	0.1	0.1	6.7	7			
02/28/2018	94	97	0.1	0.1	6.7	7			
03/31/2018	93	98	0.1	0.1	6.7	7			
04/30/2018	94.7	98	0.1	0.1	6.7	7			
05/31/2018	79	92	0.1	0.1	6.7	7	1	1	0.02
06/30/2018	61	84.6	0.1	0.1	6.7	6.9	1	1	0.02
07/31/2018	50	81	0.2	0.1	6.7	7	1	1	0.03
08/31/2018	43	78	0.3	0.2	6.7	6.9	1	1	0.04
09/30/2018	68	86	0.4	0.2	6.7	6.9	1	1	0.02

NORTHPORT VILLAGE CORPORATION	)	TENTATIVE DECISION
PUBLICLY OWNED TREATMENT WORKS,	)	OF THE REGIONAL
APPLICATION FOR SECTION 301(h) TO	)	ADMINISTRATOR PURSUANT
VARIANCE FROM THE SECONDARY	)	40 C.F.R. § 125, SUBPART G
TREATMENT REQUIREMENTS OF THE	)	
CLEAN WATER ACT	)	

The Northport Village Corporation (NVC or permittee), is a publicly owned treatment works located in the Town of Northport, Maine. The NVC 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 NVC 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.

NVC's application is seeking approval for the discharge of up to a monthly average of 63,000 gallons per day of primary treated waste water generated by residential homes within the village of Northport. The NVC 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 2, 1985, and subsequently renewed on June 29, 2004. It is my tentative decision that the NVC 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: December 18, 2018 S/SIGNATURE ON FILE

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 NORTHPORT VILLAGE CORPORATION

WASTEWATER TREATMENT PLANT

# ENVIRONMENTAL PROTECTION AGENCY REGION 1 - NEW ENGLAND

December 2018

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# LIST OF ABBREVIATIONS

BIPBalanced Indigenous Population
BOD <sub>5</sub> Biochemical Oxygen Demand
CWAClean Water Act
CZMCoastal Zone Management
DMRDischarge Monitoring Report
DODissolved Oxygen
EPAEnvironmental Protection Agency
gpdgallons per day
MEDEPMaine Department of Environmental Protection
MGDmillion gallons per day
WQSSurface Water Quality Standards
NPDESNational Pollutant Discharge Elimination System
NVCNorthport 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 Northport Village Corporation (NVC or permittee) is seeking a variance from secondary treatment requirements for a monthly average flow of up to 63,000 gallons per day (gpd) of waste water from its wastewater treatment plant. The treatment plant is located in the Town of Northport, Maine and discharges its effluent to Belfast Bay, a Class SB waterway as classified by 38 Maine Revised Statutes (M.R.S.) § 469. See Appendix A 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 NVC in accordance with the terms and conditions of its NPDES Permit/Maine Waste 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

NVC 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 NVC'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 NVC's discharge.

The applicant's most recent combined EPA Permit and Maine State License expired on July 29, 2009. NVC applied for a renewal of its Section 301(h) variance on March 13, 2009 and, upon request, submitted an updated application for a Section 301(h) variance on June 2, 2014. The expired permit remains in effect under the provisions of 40 C.F.R. § 122.6.

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

#### III. DESCRIPTION OF TREATMENT FACILITY

Sanitary waste water is generated by approximately 238 residential users in Northport Village. The facility does not receive any flow from industrial sources. The wastewater collection system consists of approximately three (3) miles of 4, 6, 8 and 10-inch ceramic and polyvinylchloride (PVC) and vitrified clay (VC) piping. The southern portion of the sanitary collection area has 8-inch sewers that run to a pump station and wastewater is then pumped in a 4-inch force main to the gravity collection system. The location of the treatment plant allows the remaining influent wastewater flow to be conveyed by gravity to the headworks.

The headworks consist of a collection manhole which intercepts flow from two (2) 10-inch PVC pipes. Flow is then designed to discharge through two (2) V-notch weirs which flow to three (3) parallel trains of septic tanks. Each train consists of four (4) 8,000 gallon settling tanks in series, providing a total volume of 96,000 gallons. Sludge is removed and disposed of off-site by a contractor. Following the septic tanks, the flow recombines in a metering manhole that includes a 30-degree V-notch weir used for flow measurement. Flow is recorded continuously and totalized on a circular flow chart.

Sodium hypochlorite is added at the metering manhole using a diaphragm metering pump. The pump speed is automatically adjusted to match the flow measured by the 30-degree V-notch weir. The flow then enters a buried, baffled, chlorine contact tank with a capacity of about 8,000 gallons. After the chlorine contact tank, the flow enters a dechlorination manhole where sodium bisulfite is added, and then an effluent manhole prior to discharge to the outfall.

In the summer of 2011, the outfall pipe was replaced with a 12" diameter high density polyethylene (HDPE) pipe that extends out into the receiving water. See Appendix B of the Fact Sheet for a schematic of the treatment process.

#### IV. DESCRIPTION OF RECEIVING WATER

Belfast 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 15 feet 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.

NVC's waste water treatment facility discharges to a shellfish harvesting area that the Maine Department of Marine Resources (MEDMR) has designated as shellfish Area C32, Belfast Bay. Just east of the discharge is MEDMR shellfish closure area C31B Great Spruce Head to Kellys Cove, Northport.

#### V. PHYSICAL CHARACTERISTICS OF THE DISCHARGE

#### A. Dilution Factors

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

Treated effluent from Northport is discharged through a 12" diameter high density polyethylene (HDPE) pipe that extends out into Belfast Bay approximately 760 feet from shore with the terminus of the outfall at a depth of 34 feet below mean low tide and 39 feet below mean 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.
- (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 63,000 gpd were as follows.

Acute = 480:1 Chronic = 871:1 Harmonic mean = 2,613:1

The effluent is less dense than sea water and flows quickly to the surface and spreads out. Strong lateral currents, significant tidal ranges (15+ feet), and wave action provide rapid mixing.

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

#### VI. APPLICATION OF STATUTORY AND REGULATORY CRITERIA

# A. Primary or Equivalent Treatment Requirements

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

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

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

The permit has flow limits, concentration and mass limitations for BOD<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 C for a summary of Discharge Monitoring Report data for the period from August 2013 through September 2018. There were no reported exceedances of limits other than one exceedance of BOD<sub>5</sub> in September 2014.

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

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

The State of Maine has adopted water quality standards including water use classifications. Belfast 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 ensures that oxygen demanding effluent is thoroughly dispersed well before it has time to depress ambient DO. EPA has no evidence of any deficiencies in dissolved oxygen in proximity to Northport 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>2</sup>

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

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

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

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

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

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

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

## 3. pH [40 C.F.R. § 125.61(a)(3)]

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

- C. Attainment or maintenance of water quality which assures protection of public water supplies; assures the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife; and allows recreational activities. [40 C.F.R. § 125.62]
  - 1. Physical Characteristics of Discharge Attainment of Water Quality Standards [40 C.F.R. § 125.62(a)(i-iii)]

The State of Maine has applicable State water quality standards that directly correspond to the CWA Section 304(a)(1) water quality criterion. With the current configuration of the outfall pipe, modeling performed indicates that it will provide adequate dilution, dispersion, and transport of

wastewater such that the discharge will not exceed, at or beyond the zone of initial dilution, any applicable water-quality standards. See Section V.A. of this document for the dilution factors calculated with the outfall.

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

The applicable Maine Water Quality Standards for these pollutants (see Maine law 38 M.R.S. §§ 465-B(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 ensure there is no discharge of toxic pollutants in toxic amounts.

EPA also reviewed available information and determined that there are no other pollutants in the discharge that would cause, have the reasonable potential to cause, or contribute to exceedances of state water quality standards pursuant to 40 C.F.R. § 122.44(d).

#### a) Fecal Coliform

Maine law 38 M.R.S. § 465-B(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 1/week.

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

### b) Enterococcus

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

### c) Total Residual Chlorine

Maine law 38 M.R.S. § 420 prohibits dischargers from discharging toxic pollutants in toxic amounts. MEDEP rule 06-096 CMR, Chapter 584 establishes numeric ambient water quality criteria for pollutants known to be toxic to aquatic life or harmful to humans. There are no pollutants discharged from the NVC 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 0.3 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)]

NVC 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 NVC 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 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 summer of 2011, the Northport Village outfall pipe was replaced with a 12" diameter high density polyethylene (HDPE) pipe that extends out into the receiving water 760 feet from shore, into 34.5 feet of water at mean low tide. The end of the outfall pipe is directed upward. This outfall improvement 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 ("2016 IWQMA"), prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the receiving water in 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 (MEDMR), Areas 32 and 31-B (See Figures 1 and 2). The closures are due to "elevated fecals only". However, since there have been no reported exceedances of the fecal coliform effluent limits from August 2013 through September 2018, there is no indication that the discharge is causing or

contributing to elevated fecal coliform in the receiving water that has occurred during the summer months. 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.

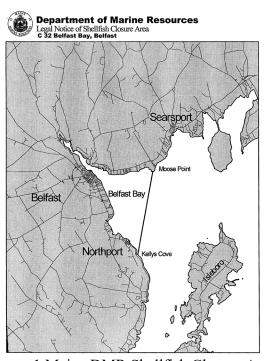


Figure 1 Maine DMR Shellfish Closure Area

Maine Department of Marine Resources

Legal Notice of Shellfish Closure Area

C31B Great Spruce Head to Kellys Cove, Northport

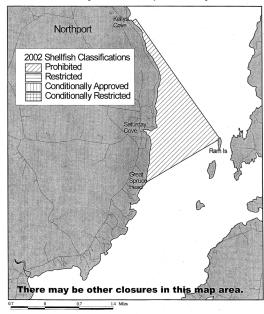


Figure 2 Maine DMR Shellfish Closure Area

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 NVC facility will not cause or contribute to the closure of the shellfish harvesting area. 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 NVC wastewater treatment plant 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 MEDEP that further SCUBA inspections of 301(h) outfalls was too dangerous due to the swift currents generally found in these receiving waters. David Courtemanch, the MEDEP Senior Biologist and diver with the most experience in potential impact of the 301(h) facilities in Maine concluded that "any monitoring beyond effluent sampling is useless, wasteful, and of no environmental benefit. 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.

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

40 C.F.R. § 125.64(a) states that no modified discharge may result in any additional pollution control requirements on any other point or nonpoint source, and 40 C.F.R. § 125.64(b) requires that the applicant obtain a determination from the State or interstate agency having authority to establish waste load allocations indicating whether the applicant's discharge will result in any additional treatment pollution control, or other requirement on any other point or nonpoint source. NVC 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.

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

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

NVC 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) NVC 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 non-industrial source control does not apply to small applicants that certify that there are no known or suspected water quality, sediment accumulation, or biological problems related toxic pollutants or pesticides in its discharge. NVC qualifies as a small applicant and provided this certification with their application submissions.

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

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

The NVC 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 NVC collection system. Therefore, NVC is in compliance with 40 C.F.R. § 125.67(b).

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

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

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

The NPDES permit contains such effluent limits and mass loadings.

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

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

NVC 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 NVC'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 above.

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

In recognition of the composition of the wastewater and the significant dilution provided, EPA and MEDEP finds that receiving water quality monitoring is not necessary.

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

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

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

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

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

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

### A. State Coastal Zone Management Program

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

## **B.** Endangered or Threatened Species

Section 7(a) of the Endangered Species Act of 1973, as amended (ESA), grants authority 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>3</sup> Following the meeting, EPA sent a detailed letter with supporting materials to NMFS concerning all eight municipal permits with waivers (301(h)) from

<sup>&</sup>lt;sup>3</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.

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>4</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>5</sup>

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 April 5, 2017, determination that the proposed action will not result in the destruction or adverse modification of the proposed critical habitat.

## C. Marine Protection, Research and Sanctuaries Act

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

## D. Essential Fish Habitat (EFH)

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

<sup>&</sup>lt;sup>4</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 I.

<sup>&</sup>lt;sup>5</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 I.

## 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>6</sup> The initial meeting was followed by a letter from EPA to Louis A. Chiarella, Assistant Regional Administrator, Habitat Conservation Division, NMFS.<sup>7</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 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 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.

## 2. EFH Species

The discharge location (N 44° 22' 53.87" N, W 68° 57' 55.63" 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.

<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> Letter from Doug Corb, EPA Region I Municipal Permits Branch to Louis A. Chiarella, Assistant Regional Administrator, Habitat Conservation Division, NMFS., Dated June 29, 2017.

**Table 1 – EFH Designations** 

Boundary	North	Eas	t	South		West	
Coordinates	44° 20.0 N	68° 50.0 W		44° 10.0 N		69° 00.0 W	
Species			Eggs	Larvae	Juven	iles Adults	
Atlantic salmon (Salmo salar)					X	X	
Atlantic cod (Gadus morhua)				X	X	X	
haddock (Melanogrammus aeglefinus)						X	
pollock (Pollachius virens)					X		
whiting (Merluccius bilinearis)					X	X	
red hake (Urophycis chuss)					X	X	
white hake (Urophycis tenuis)					X	X	
winter flounder (Pseudopleuronectes americanus)			X	X	X	X	
yellowtail flounder (Limanda ferruginea)			X	X			
windowpane flounder (Scophthalmus aquosus)			X	X	X	X	
American plaice (Hippoglossoides platessoides)			X	X	X	X	
ocean pout (Macrozoarces americanus)			X	X	X	X	
Atlantic halibut (Hip	poglossus hippogloss	sus)					
Atlantic sea scallop (Placopecten magellanicus)		X	X	X	X		
Atlantic sea herring (Clupea harengus)				X	X	X	
bluefish (Pomatomus saltatrix)					X	X	
Atlantic mackerel (Scomber scombrus)					X	X	
bluefin tuna (Thunnus thynnus)						X	

## 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 NVC 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 NVC request to discharge primary effluent to Belfast Bay. This Tentative Decision is contingent upon the following conditions:

- 1. The NVC 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.

#### XI. PUBLIC COMMENTS

The public notice will be placed on the EPA Region 1 NPDES website at: <a href="https://www.epa.gov/npdes-permits/maine-npdes-permits">https://www.epa.gov/npdes-permits/maine-npdes-permits</a>. All persons, including applicants, who believe any condition of the tentative decision is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the U.S. EPA, Office of Ecosystem Protection, 5 Post Office Square, Suite 100, Boston, Massachusetts 02109-3912, Attn: Doug Corb. Any person, prior to such date, may submit a request in writing for a public hearing to consider the tentative waiver decision to EPA. Such requests shall state the nature of the issues proposed to be raised in the hearing. Public hearings may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates a significant public interest. In reaching a final decision on the tentative waiver decision, the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

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

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

Email: corb.doug@epa.gov

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: ME0100901

PUBLIC NOTICE NUMBER: ME-001-19

NAME AND MAILING ADDRESS OF APPLICANT:

Northport Village Corporation 813 Shore Road Northport, Maine 04849

NAME AND ADDRESS OF THE FACILITY WHERE DISCHARGE OCCURS:

Northport Village Corporation Waste Water Treatment Facility Pleasant Street Northport Maine 04849

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

The administrative record containing all documents relating to this Draft Permit and Secondary Treatment Waiver Decision, including all data submitted by the applicant, may be inspected at the EPA Boston Office mentioned above between 9:00 a.m. and 5:00 p.m., Monday through Friday, except holidays.

## PUBLIC COMMENT AND REQUEST FOR PUBLIC HEARING:

All persons, including applicants, who believe any condition of this Draft Permit and or Secondary Treatment Waiver Decision, are inappropriate, must raise all issues and submit all available arguments and all supporting material for their arguments in full by **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