STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JANET T. MILLS
GOVERNOR

GERALD D. REID
COMMISSIONER

June 25, 2019

Mr. Paul Lippman
Lincolnville Sewer District
P.O. Box 302
Lincolnville, ME 04849
Terrapin@tidewater.net

Sent via electronic mail
Delivery confirmation requested

RE: *Maine Pollutant Discharge Elimination System (MEPDES) Permit ME0102857*
Maine Waste Discharge License (WDL) Application W007496-6B-H-R
Proposed Draft MEPDES Permit – Renewal

Dear Mr. Lippman:

Attached is a proposed draft MEPDES permit and Maine WDL which the Department proposes to issue for your facility as a final document after opportunity for your review and comment. By transmittal of this letter, you are provided with an opportunity to comment on the proposed draft permit and its special and standard conditions. If it contains errors or does not accurately reflect present or proposed conditions, please respond to this Department so that changes can be considered.

By copy of this letter, the Department is requesting comments on the proposed draft permit from various state and federal agencies and from any other parties who have notified the Department of their interest in this matter.

The comment period begins on June 25, 2019 and ends on July 25, 2019. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business on July 25, 2019. Failure to submit comments in a timely fashion will result in the proposed draft/license permit document being issued as drafted.

Comments in writing should be submitted to my attention at the following address:

Maine Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, ME 04333-0017
Aaron.A.Dumont@maine.gov

If you have any questions regarding the matter, please feel free to contact me.

Sincerely,

Aaron Dumont
Division of Water Quality Management
Bureau of Water Quality
ph: 207-592-7161

cc:
Jim Crowley, MEDEP
Pamela Parker, MEDEP
Lori Mitchell, MEDEP
Ellen Weitzler, USEPA
Alex Rosenberg, USEPA
Solanch Pastrana-Del Valle, USEPA
Marelyn Vega, USEPA
Richard Carvalho, USEPA
Shelley Puleo, USEPA
Environmental Review, IFW
Sean Mahoney, CLF

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

LINCOLNVILLE SEWER DISTRICT	)	MAINE POLLUTANT DISCHARGE
PUBLICALLY OWNED TREATMENT WORK	)	ELIMINATION SYSTEM PERMIT
LINCOLNVILLE, WALDO COUNTY, MAINE	)	AND
ME0102857	)	WASTE DISCHARGE LICENSE
W007496-6B-H-R **APPROVAL**	)	**TRANSFER**

In compliance with the applicable provisions of *Pollution Control*, 38 M.R.S. §§ 411 – 424-B, *Water Classification Program*, 38 M.R.S. §§ 464 – 470 and *Federal Water Pollution Control Act*, Title 33 U.S.C. § 1251, and applicable rules of the Department of Environmental Protection (Department), the Department has considered the application of the LINCOLNVILLE SEWER DISTRICT (LSD/permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On January 2, 2019, the Department accepted as complete for processing, a renewal application from LSD for Waste Discharge License (WDL) W007496-5C-G-R/Maine Pollutant Discharge Elimination System (MEPDES) permit ME0102857, which was issued on October 6, 2015, for a five-year term. The 10/6/15 MEPDES permit authorized Lincolnville Beach Sanitary Facility LBSF to discharge a daily maximum flow of 10,655 gallons per day (GPD) of secondary treated municipal wastewater to West Penobscot Bay, Class SB, in Lincolnville, Maine. The existing facilities are owned and operated by the Lincolnville Beach Sanitary Facility, Inc. (LBSF). As part of the proposed project, the LBSF will transfer ownership of the existing WWTF to the Lincolnville Sewer District (LSD). LSD is replacing and upgrading the LBSF treatment plant with a new activated sludge package treatment plant capable of a monthly average flow of 25,000 GPD of secondary treated wastewater. The LBSF will continue operation of the existing WWTF until the new WWTF is online.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permitting action and subsequent minor revisions except that this permitting action is:

1. Establishing a new monthly average flow of 25,000 GPD to be reflective of the design capacity of the new treatment works.

2. Establishing a new mass based effluent limitation for BOD & TSS derived from the design capacity of the new treatment works.

3. Establishing a new monitoring frequency for pH to characterize and establish a baseline of the effluent from the new treatment works.

4. Establishing a quarterly monitoring and reporting requirement for Mercury to establish a baseline of the effluent from the new treatment works.

5. Establishing Special Condition D. Limitation for Industrial Users.

PERMIT SUMMARY (cont'd)

6. Increasing the monitoring frequency of Settleable Solids from 1/Week to 3/Week.

7. Increasing the monitoring frequency of Fecal coliform from seasonal to year-round.

8. Establishing a seasonal monitoring requirement for Enterococci bacteria from April 15th – October 31st starting on April 15th, 2021.

9. Establishing a monitoring requirement of 1/week for total residual chlorine when chlorine compounds are in use.

10. Eliminating Special Condition B. Annual Discharge Fees associated with previous permit.

11 Eliminating Special Condition G. Site Evaluation Requirement and establishing a new Special Condition G. Wet Weather Management Plan.

12. Eliminating Special Condition I. Septic Tanks and Grease Traps and establishing Special Condition I. Statement for Reduced/Waived Toxics Testing.

CONCLUSIONS

Based on the findings summarized in the attached Fact Sheet dated June 24, 2019, and subject to the special and standard conditions that follow, the Department makes 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 such 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, *Classification of Maine waters*, 38 M.R.S. § 464(4)(F), will be met, in that:

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

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

    c. Where the standards of classification of the receiving waterbody are not met, the discharge will not cause or contribute to the failure of the waterbody to meet the standards of classification;

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

CONCLUSIONS (cont'd)

e. Where a discharge will result in lowering the existing water quality of any waterbody, 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 as defined in *Conditions of licenses*, 38 M.R.S. § 414-A(1)(D).

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ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the LINCOLNVILLE SEWER DISTRICT to discharge a monthly average flow of 25,000 GPD of secondary treated wastewater to West Penobscot Bay, Class SB, in Lincolnville, 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, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21)(A) (amended June 9, 2018)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS ____ DAY OF _____ 2019.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
GERALD D. REID, Commissioner

Date filed with Board of Environmental Protection_____

Date of initial receipt of application: January 2, 2019
Date of application acceptance: January 2, 2019

This Order prepared by Aaron Dumont, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS

A.1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Beginning upon issuance of this permit, the permittee is authorized to discharge secondary treated municipal wastewater from a publicly owned treatment works via **OUTFALL #001A** to West Penobscot Bay. Such discharges are limited and must be monitored by the permittee as specified below[(1)].

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	---	---	25,000 GPD *[03]*	---	---	---	1/Day *[01/01]*	Meter *[MS]*
BOD_5 *[00310]*	6.3 lbs./Day *[26]*	9.4 lbs./Day *[26]*	10.4 lbs./Day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Month *[01/30]*	Grab *[GR]*
BOD5 % Removal[(2)] *[81010]*	---	---	---	85% *[23]*	---	---	---	Calculate *[CA]*
TSS *[00530]*	6.3 lbs./Day *[26]*	9.4 lbs./Day *[26]*	10.4 lbs./Day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	1/Month *[01/30]*	Grab *[24]*
TSS % Removal[(2)] *[81011]*	---	---	---	85% *[23]*	---	---	---	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	3/Week *[03/07]*	Grab *[GR]*
Fecal Coliform Bacteria[(3)(4)] *(Year-round)[74055]*	---	---	---	14/100 ml[(3)] *[13]*	---	31/100 ml *[13]*	1/Week *[1/07]*	Grab *[GR]*
Enterococci Bacteria[(5)] *(Seasonally April 15th-October 31st Beginning 2021) [61211]*	---	---	---	8/100 ml *[13]*	---	54/100 ml *[13]*	1/Week *[1/07]*	Grab *[GR]*
Total Residual Chlorine[(6)] *[50060]*	---	---	---	---	---	1.0 mg/L *[19]*	1/Week *[01/07]*	Grab *[GR]*
pH (Standard Units) *[00400]*	---	---	---	---	---	6.0-9.0 *[12]*	5/Week *[05/07]*	Grab *[GR]*
Mercury (Total)[(7)] *[71900]*	---	---	---	Report ng/L *[3M]*	---	Report ng/L *[3M]*	4/Year *[04/YR]*	Grab *[GR]*

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports

FOOTNOTES: See Pages 5 – 9 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES:

1. **Sampling** – The permittee must conduct all effluent sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified for wastewater by the State of Maine's Department of Health and Human Services. 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 December 19, 2018). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10-144 CMR 263. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR.

2. **Percent Removal** – The permittee must achieve a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values.

3. **Fecal Coliform Bacteria** – Fecal coliform bacteria limits and monitoring requirements are in effect year-round.

4. **Fecal Coliform Bacteria Reporting** – The monthly average limitation is a geometric mean limitation and results must be reported as such.

5. **Enterococcus Bacteria Reporting** – Enterococcus bacteria limits and monitoring requirements are seasonal running from April 15th – October 31st. These monitoring and reporting requirement must commence on April 15th, 2021.

6. **Total residual chlorine (TRC)** – Limitations and monitoring requirements are in effect any time elemental chlorine or chlorine-based compounds are utilized to disinfect the discharge(s). The permittee must utilize a USEPA-approved test method capable of bracketing the TRC limitations specified in this permitting action. Monitoring for TRC is only required when elemental chlorine or chlorine-based compounds are in use for effluent disinfection. For instances when a facility has not disinfected with chlorine-based compounds for an entire reporting period, the facility must report "N9" on the electronic DMR.

SPECIAL CONDITIONS

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

FOOTNOTES:

7. **Mercury** – The permittee must conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. See **Attachment A** for a Department report form for mercury test results. Future compliance with a monthly average limitation established in Special Condition A.1 of this permit will be based on the cumulative arithmetic mean of all mercury tests results conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.

   Pursuant to Special Condition K, Reopening of Permit for Modification, of this permit, and alternative mercury testing regime and/or limitation will be established after the permittee has completed the initial (4 year) testing requirements of this permit and the Department has conducted a statistical evaluation.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The permittee must not discharge effluent that contains a visible oil sheen, foam or floating solids at any time which would impair the uses designated by the classification of the receiving waters.

2. The permittee must not discharge effluent that contains materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the uses designated by the classification of the receiving waters.

3. The permittee must not discharge effluent that imparts color, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsafe for the designated uses and characteristics ascribed to their classification.

4. The permittee must not discharge effluent that lowers 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.

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SPECIAL CONDITIONS

C. TREATMENT PLANT OPERATOR

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

D. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the wastewater collection and treatment system by a non-domestic source (user) must not pass through or interfere with the operation of the treatment system. The permittee must conduct an Industrial Waste Survey (IWS) any time a new industrial user proposes to discharge within its jurisdiction; an existing user proposes to make a significant change in its discharge; or at an alternative minimum, once every permit cycle and submit the results to the Department. The IWS must identify, in terms of character and volume of pollutants, any Significant Industrial Users discharging into the POTW subject to Pretreatment Standards under section 307(b) of the federal *Clean Water Act*, 40 CFR Part 403 (general pretreatment regulations) or *Pretreatment Program*, 06-096 CMR 528 (last amended March 17, 2008).

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on January 2, 2019; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of wastewater from any other point source(s) are not authorized under this permit, and must be reported in accordance with Standard Condition D(1)(f), *Twenty-four hour reporting*, of this permit.

F. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee must notify the Department of the following:

1. Any introduction of pollutants into the wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and

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

SPECIAL CONDITIONS

F. NOTIFICATION REQUIREMENT (cont'd)

3. For the purposes of this section, notice regarding substantial change must include information on:

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

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

G. WET WEATHER MANAGEMENT PLAN

The treatment facility staff must have a current written Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. A specific objective of the plan must be to maximize the volume of wastewater receiving secondary treatment under all operating conditions. The revised 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 for before, during and after the events.

The permittee must review their plan at least annually and record any necessary changes to keep the plan up to date. The Department may require review and update of the plan as it is determined to be necessary.

H. OPERATIONS AND MAINTENANCE (O&M) PLAN

The permittee must maintain a current written comprehensive Operation & Maintenance (O&M) Plan for the facility. 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, **or within 90 days of any process changes or minor equipment upgrades,** the permittee must evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O&M Plan must be kept on-site at all times and made available to Department and USEPA personnel upon request.

Within 90 days of completion of new and or substantial upgrades of the wastewater treatment facility, the permittee must submit the updated O&M Plan to their Department inspector for review and comment.

SPECIAL CONDITIONS

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

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 ***[ICIS Code 75305]***. See **Attachment D** for an acceptable certification form to satisfy this Special Condition.

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

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

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

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

d. Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and

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

The Department may require that routine surveillance level testing be re-instated if it determines that there have been changes in the character of the discharge or if annual certifications described above are not submitted.

J. MONITORING AND REPORTING

Electronic Reporting

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

Electronic Discharge Monitoring Reports (DMRs) submitted using the USEPA NetDMR system, must be:

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

SPECIAL CONDITIONS

J. MONITORING AND REPORTING (cont'd)

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the DEP toxsheet reporting form. An electronic copy of the Toxsheet reporting document must be submitted to your Department compliance inspector as an attachment to an email. In addition, a hardcopy form of this sheet must be signed and submitted to your compliance inspector, or a copy attached to your NetDMR 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.

Toxsheet reporting forms must be submitted electronically as an attachment to an email sent to your Department compliance inspector. In addition, a signed hardcopy of your toxsheet must also be submitted.

A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned compliance inspector (unless otherwise specified) following address:

Department of Environmental Protection
Bureau of Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333-0017

K. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S. § 414-A(5) and upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information 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 monitoring requirements or limitations based on new information.

L. SEVERABILITY

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

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: **June 24, 2019**

PERMIT NUMBER: **ME0102857**
WASTE DISCHARGE LICENSE: **W007496-6B-H-R**

NAME AND ADDRESS OF APPLICANT:

LINCOLNVILLE SEWER DISTRICT
P.O. BOX 302
LINCOLNVILLE, MAINE 04849

COUNTY: **WALDO**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

LINCOLNVILLE SEWER DISTRICT
P.O. BOX 302
LINCOLNVILLE, ME 04849

RECEIVING WATER CLASSIFICATION: **ATLANTIC OCEAN/CLASS SB**

COGNIZANT OFFICIAL CONTACT INFORMATION:

PAUL LIPPMAN
(207)-763-3555
Terrapin@tidewater.net

1. APPLICATION SUMMARY

On January 2, 2019, the Department of Environmental Protection (Department) accepted as complete for processing, a renewal application from Lincolnville Sanitary District (LSD) for Waste Discharge License (WDL) W007496-5C-G-R/Maine Pollutant Discharge Elimination System (MEPDES) permit ME0102857, which was issued on October 6, 2015, for a five-year term. The 10/6/15 MEPDES permit authorized Lincolnville Beach Sanitary Facility LBSF to discharge a daily maximum flow of 10,655 gallons per day (GPD) of secondary treated municipal wastewater to West Penobscot Bay, Class SB, in Lincolnville, Maine. The existing facilities are owned and operated by the Lincolnville Beach Sanitary Facility, Inc. (LBSF). As part of the proposed project, the LBSF will transfer ownership of the existing WWTF to the Lincolnville Sewer District (LSD). LSD is replacing and upgrading the LBSF treatment plant with a new activated sludge package treatment plant capable of a monthly average flow of 25,000 GPD of secondary treated wastewater. The LBSF will continue operation of the existing WWTF until the new WWTF is online.

2. PERMIT SUMMARY

a. Terms and Conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting action and subsequent minor revisions except that it:

1. Establishing a new monthly average flow of 25,000 GPD to be reflective of the design capacity of the new treatment works.

2. Establishing a new mass based effluent limitation for BOD & TSS derived from the design capacity of the new treatment works.

3. Establishing a new monitoring frequency for pH to characterize and establish a baseline of the effluent from the new treatment works.

4. Establishing a quarterly monitoring and reporting requirement for Mercury to establish a baseline of the effluent from the new treatment works.

5. Establishing Special Condition D. Limitation for Industrial Users.

6. Increasing the monitoring frequency of Settleable Solids from 1/Week to 3/Week.

7. Increasing the monitoring frequency of Fecal coliform from seasonal to year-round.

8. Establishing a seasonal monitoring requirement for Enterococci bacteria from April 15th – October 31st.

9. Establishing a monitoring requirement of 1/week for total residual chlorine when chlorine compounds are in use.

10. Eliminating Special Condition B. Annual Discharge Fees associated with previous permit.

11. Eliminating Special Condition G Site Evaluation Requirement and establishing a new Special Condition G. Wet Weather Management Plan.

12. Eliminating Special Condition I. Septic Tanks and Grease Traps and establishing Special Condition I. Statement for Reduced/Waived Toxics Testing.

b. History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the permittee.

February 19, 1989 – The Department issued to Richard McLaughlin of the Lobster Pound Restaurant, Waste Discharge License (WDL) #W007496-66-A-N for the discharge of 6,000 gpd of treated wastewater from a 286-seat restaurant and a takeout stand. W007496-66-A-N replaced WDL #W003192-41-A-R.

September 6, 1990 – The Department issued WDL #W007496-66-B-T to the Lincolnville Beach Sanitary Facility, transferring and modifying the previous license. WDL #W007496-66-B-T included the discharge from a number of commercial/residential structures, the previously permitted restaurant, takeout, and the local fire station, all of which were part of this permit.

2. PERMIT SUMMARY (cont'd)

October 21, 1991 – The Department issued WDL #W007496-66-C-M modifying the previous license to include: the discharge from a one-bedroom year-round dwelling located above the restaurant on Lot 79; extending the operating period for the restaurant to nine months of the year; and adding the discharge from the Department of Transportation Ferry Terminal. The total licensed discharge was increased to 10,655 to accommodate the additional flow. All of the added discharges were in continuous existence for the year prior to June 1, 1987.

December 30, 1992 – The Department issued WDL #W007496-66-D-R renewing the previous order as a conditional permit.

July 31, 2000 – The Department issued WDL #W007496-5C-E-R renewing the previous order for 10 years.

August 5, 2010 – The Department issued combination MEPDES permit #ME0102857/WDL #W007495-5C-F-R for a five-year term.

October 6, 2015 − The Department issued combination MEPDES permit #ME0102857/WDL #W007495-5C-G-R for a five-year term.

January 2, 2019 – The permittee submitted a timely and complete application to the Department to renew #ME0102857/WDL W007495-5C-G-R for a publicly owned wastewater treatment facility located on off U.S. Route 1 in Lincolnville, Maine. Once the facility is completed then the Town of Lincolnville will assign a 911 address to that location. This facility will provide secondary treatment for 25,000 of municipally generated wastewater. The application was accepted for processing on January 2, 2019.

c. Source Description: At present the LSD facility treats wastewater from a cluster of ten commercial entities along the beach on Route #1 in Lincolnville. Sources include restaurants, the fire station, antique and glass shops. Once the LSD facility is retired and the new Lincolnville Sanitary District facility is up an running the District will treat wastewater from residential and commercial properties along Route 1 and Route 173 in Lincolnville.

d. Wastewater Treatment: The current wastewater treatment plant was installed in 1991 and presently serves less than 10 connections. Wastewater generated from the entities receives a secondary level of treatment via a mechanical treatment facility. The treated wastewater is seasonally disinfected (May 15 – September 30) and dechlorinated via tablet chlorinators/dechlorinators and discharges to West Penobscot Bay, Class SB, via a pipe measuring 3 inches in diameter. The outfall pipe extends out into the receiving water with approximately ten (10) feet of water over the crown of the pipe at mean low tide.

LSD is proposing to construct a new wastewater treatment facility. The new facility will have biological treatment that uses a biologically active filter for treatment. The system consists of several stages including two anoxic/equalization tanks, a reactor tank and an effluent clear well tank. Additional processes include ultraviolet disinfection. The existing 3-inch HDPE outfall pipe will be reused. The outfall will consists of a 3-inch HDPE pipe with multi-port diffuser that will discharge 25,000 gpd into West Penobscot Bay.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the 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, *Certain deposits and discharges prohibited,* 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program,* 06-096 CMR 530 (effective March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584 (effective July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of estuarine and marine waters, 38 M.R.S. § 469(8) classifies all estuarine and marine water lying within the boundaries of Waldo County that are not otherwise classified are Class SB waters. *Standards for classification of estuarine and marine waters,* 38 M.R.S. § 465-B(2), describes the standards for Class SB waters.

5. RECEIVING WATER QUALITY CONDITIONS

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 marine waters at the permittee's outfall (Waterbody ID 722) as "Category 5-B-1(a): Estuarine and Marine Water Impaired for Bacteria Only − TMDL Required."

The Maine Department of Marine Resources (MEDMR) closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions and current shoreline surveys. In addition, the MEDMR prohibits shellfish harvesting in the immediate vicinity of all wastewater treatment outfall pipes as a precautionary measure in the event of a failure in the treatment plant's disinfection system.

Thus, shellfish harvesting area #31-A is closed to the harvesting of shellfish due the location of Lincolnville Sanitary District's wastewater treatment plant outfall. The shellfish closure area can be found at http://www.maine.gov/dmr/shellfish-sanitation-management/closures/pollution.html

Category 5-D*: Estuarine and Marine Waters Impaired by Legacy Pollutants*. All estuarine and marine waters capable of supporting American lobster are listed in Category 5-D, partially supporting fishing ("shellfish" consumption) due to elevated levels of polychlorinated biphenyls (PCBs) and other persistent, bioaccumulating substances in lobster tomalley.

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6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

a. Flow: The previous permitting action established a daily maximum discharge flow limitation of 10,655 gpd from March 1 – November, 4,955 gpd from December 1 – February 28. The limitations were reflective of the seasonal nature of wastewater generation rates. The largest generator of wastewater was a restaurant that generated 5,000 gpd which is closed during the winter months.

The Department reviewed 38 Discharge Monitoring Reports (DMRs) that were submitted for the period October 2015 – February 2019. A review of the data indicates that following:

Flow March-November (DMRs=27)

Value	Limit (MGD)	Range (GPD)	Mean (GPD)
Daily Maximum	10,655	1844 – 9855	6005

Flow December-February (DMRs=9)

Value	Limit (MGD)	Range (GPD)	Mean (GPD)
Daily Maximum	4955	1337 – 4864	2703

This permitting action is increasing the flow as part of the facility upgrade. *Waste Discharge License Conditions* 06-096 CMR 523(5)(2)(i) mirrors Section 402(o) of the Clean Water Act that contains prohibitions for anti-backsliding. Generally, antibacksliding prohibits the issuance of a renewed permit with less stringent limitations than were established in the previous permit. CMR 523 and the Clean Water Act contain certain exceptions to antibacksliding in Section (specifically 402(o)(2)).

06-096 CMR 523(5)(2)(i)(A) contains an exception to anti-backsliding for substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. Therefore, this permitting action is increasing the flow limitation to 25,000 GPD. [It is noted that anti-backsliding prohibitions and exceptions are mirrored in Chapter 523 of the Department's rules at 40 CFR 122.44(1)(2)(i)(B)(l).].

b. Dilution Factors: 06-096 CMR 530(4)(A)(2)(a) states that, *"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."* With a permitted flow limitation of 25,000 GPD and the location and configuration of the outfall structure, the Department has established dilution factors as follows:

Acute = 125:1 Chronic = 365:1 Harmonic mean[(1)] = 1,095:1

Notes:

[1]The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the U.S. EPA publication, "*Technical Support Document for Water Quality-Based Toxics Control"* (Office of Water; USEPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

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

c. Biochemical Oxygen Demand and Total Suspended Solids:

The previous permitting action carries forward the technology-based monthly average and daily maximum BOD_5 and TSS concentration limits of 30 mg/L and 50 mg/L, respectively. The monthly average concentration limit is based on secondary treatment requirements as defined in 06-096 CMR Chapter 525(3)(III). The daily maximum BOD_5 and TSS concentration limits of 50 mg/L were based on a Department best professional judgment (BPJ) of best practicable treatment (BPT).

The previous permitting established monthly average, weekly average and daily maximum BOD_5 and TSS mass limitations which were based on calculations using the flows of 10,655 gpd (0.010655 MGD) and 4,955 gpd (0.004955 MGD), pursuant to 06-096 CMR Chapter 525(3)(III). Due to the facility upgrade, this permitting action establishes monthly average, weekly average and daily maximum mass limitations that are based on a design capacity monthly average flow of 25,000 GPD (0.025 MGD). The mass limits were derived as follows:

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs./gallon)(0.025 MGD) = 6.3 lbs./day
Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./gallon)(0.025 MGD) = 9.4 lbs./day
Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./gallon)(0.025 MGD) = 10.4 lbs./day

Waste Discharge License Conditions 06-096 CMR 523(5)(2)(i) mirrors Section 402(o) of the Clean Water Act that contains prohibitions for anti-backsliding. Generally, antibacksliding prohibits the issuance of a renewed permit with less stringent limitations than were established in the previous permit. CMR 523 and the Clean Water Act section 402(o)(2) contains certain exceptions to antibacksliding. 06-096 CMR 523(5)(2)(i)(A) contains an exception to anti-backsliding for substantial alterations or additions to the permitted facility that occurred after permit issuance which justify the application of a less stringent effluent limitation. Therefore, this permitting action is increasing the mass limitations for BOD_5 and TSS. [It is noted that anti-backsliding prohibitions and exceptions are mirrored in Chapter 523 of the Department's rules at 40 CFR 122.44(1)(2)(i)(B)(l).]

This permitting action is carrying forward the requirement for a minimum of 85% removal of BOD_5 and TSS as required by 06-096 CMR 525(3)(III)(a)(3) and (b)(3) of the Department's rules. The permittee has not demonstrated that it qualifies for special considerations pursuant to 06-096 CMR 525(3)(IV) to maintain a waiver from the 85% removal requirement when influent concentration is less than 200 mg/L.

The Department reviewed 36 DMRs that were submitted for the period October 2015 – February 2019. A review of data indicates the following:

BOD_5 Mass March-November (DMRs=27)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	2.7	0.01 – 1	0.19
Weekly Average	4.0	0.01 – 1.44	0.2
Daily Maximum	4.4	0.01 – 1.44	0.2

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

BOD_5 Mass December-February (DMRs=9)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	1.2	0.02 – 0.09	0.04
Weekly Average	1.8	0.02 – 0.09	0.04
Daily Maximum	2.1	0.02 – 0.09	0.04

BOD_5 Concentration March- November (DMRs=27)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	2.4 – 26	9.0
Weekly Average	45	2.4 – 38	9.6
Daily Maximum	50	2.4 – 38	9.6

BOD_5 Concentration December- February (DMRs=9)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	2 – 5.2	3.6
Weekly Average	45	2 – 5.2	3.6
Daily Maximum	50	2 – 5.2	3.6

TSS Mass March-November(DMRs=28)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	2.7	0.01 – 0.73	0.22
Weekly Average	4.0	0.01 – 0.73	0.22
Daily Maximum	4.4	0.01 – 0.73	0.22

TSS Mass December-February (DMRs=10)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	2.7	0.03 – 0.3	0.1
Weekly Average	4.0	0.03 – 0.3	0.1
Daily Maximum	4.4	0.03 – 0.3	0.1

TSS Concentration March-November (DMRs=28)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	1.7 – 27	11.2
Weekly Average	45	1.7 – 27	11.2
Daily Maximum	50	1.7 – 27	11.2

TSS Concentration December-February (DMRs=10)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	3.2 – 23	11.3
Weekly Average	45	3.2 – 23	11.3
Daily Maximum	50	3.2 – 23	11.3

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

d. Settleable Solids: The previous permitting action established and this permitting action is carrying forward a daily maximum technology limit of 0.3 ml/L for settleable solids, which is considered by the Department as a best professional judgment of BPT for secondary treated wastewater, along with a minimum monitoring frequency requirement of 3/Week. The Department is considering 38 months of data (October 2015 – February 2019). During this reporting period of October 2015 – February 2019 the permittee reported no excursions that exceeded the daily maximum of 0.3 ml/L for settleable solids.

Waste Discharge License Conditions 06-096 CMR 523(5)(2)(i) mirrors Section 402(o) of the Clean Water Act that contains prohibitions for anti-backsliding. Generally, antibacksliding prohibits the issuance of a renewed permit with less stringent limitations than were established in the previous permit. CMR 523 and the Clean Water Act section 402(o)(2) contains certain exceptions to antibacksliding. 06-096 CMR 523(5)(2)(i)(A) contains an exception to anti-backsliding for substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. Therefore, this permitting action is increasing the mass limitations for BOD_5 and TSS. [It is noted that anti-backsliding prohibitions and exceptions are mirrored in Chapter 523 of the Department's rules at 40 CFR 122.44(1)(2)(i)(B)(l).]

Settleable Solids Concentration (DMRs=38)

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	0.10 – 0.10	0.1

e. Fecal Coliform Bacteria: The previous permitting action established monthly average and daily maximum concentration limits of 15 colonies/100 ml and 50 colonies/100 ml, respectively, for fecal coliform bacteria, which are consistent with the National Shellfish Sanitation Program.

A summary of effluent fecal coliform bacteria data as reported on the DMRs for the period October 2015 – February 2019 is as follows:

Fecal coliform bacteria (DMR = 15)

Value	Limit (col/100 mL)	Range (col/100 mL)	Mean (col/100 mL)
Monthly Average	15	1 – 1.89	9.56
Daily Maximum	50	1 – 200	32

The previous permit established and this permit is carrying forward a minimum monitoring frequency for fecal coliform bacterial of one time per week (1/Week) based on the Department best professional judgment (BPJ). At the request of the Maine Department of Marine Resources **fecal coliform bacteria and monitoring limits are in effect year-round. Total residual chlorine (TRC) limits and monitoring requirements are in effect year-round whenever chlorine compounds are in use at the request of the Maine Department of Marine Resources in order to protect local shellfish resources near the outfall and to protect the health, safety and welfare of the public.**

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

f. Enterococcus Bacteria: This permitting action is establishing a monitoring requirement for enterococcus bacteria based on current Maine criteria. In addition to fecal coliform limits to protect the designated use of "propagation and harvesting of shellfish", it is appropriate to require end-of-pipe limits for enterococcus bacteria, based on current Maine criteria, to protect the designated use of "recreation in and on the water" on a seasonal basis starting on April 15th, 2021. The seasonal reporting period will be April 15th through October 31st starting on April 15, 2021. A 1/Week monitoring requirement is also being established in this permitting action.

g. Total Residual Chlorine (TRC): Limits on total residual chlorine are specified to ensure attainment of the in-stream water quality criteria for chlorine and that Best Practicable Treatment (BPT) technology is utilized to abate the discharge of chlorine. Permits issued by this Department impose the more stringent of the calculated water quality based or BPT based limits. The previous permitting action established a monthly average technology based limit of 0.1 mg/L and a daily maximum technology based limitation of 0.3 mg/L. End-of-pipe water quality based thresholds for TRC were calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Acute Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.013 mg/L	0.0075 mg/L	125:1 (A) 365:1 (C)	1.6 mg/L	2.7 mg/L

The Department has established a daily maximum best practicable treatment (BPT) limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine based compounds unless the calculated acute water quality based threshold is lower than 1.0 mg/L. For facilities that need to dechlorinate the discharge in order to meet water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively unless the water quality based thresholds calculated are lower than the BPT limits.

The permittee's facility does not need to dechlorinate the effluent prior to discharge in order to consistently achieve compliance with the calculated acute water quality-based threshold. Therefore, this permitting action is carrying forward a daily maximum technology based concentration limit of 1.0 mg/L from the previous licensing action.

The Department reviewed 15 DMRs that were submitted for the period October 2015 – February 2019. A review of data indicates the following:

Total Residual Chlorine (DMRs=15)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.00 – 0.89	0.40

h. pH: The previous permitting action established a 1/YR monitoring requirement. This permitting action is establishing a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 CMR 525(3)(III)(c) and an increased monitoring frequency requirement of 5/Week.

A summary of pH data as reported on the monthly DMRs for the period of October 2015 – February 2019 (DMRs = 28) indicates the effluent pH has ranged from 6.20 to 7.10 (SU).

pH (DMRs=28)

Value	Limit (SU)	Range (SU)
Monthly Average	6.0 – 9.0	6.06 – 7.4
Daily Maximum	6.0 – 9.0	6.16 – 7.9

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

i. Mercury: This permitting action is establishing a 4/Year monitoring requirement for Mercury 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 permittee must conduct all mercury sampling required by this permit or required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the USEPA's "clean sampling techniques" found in USEPA Method 1669, *Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels*. All mercury analysis must be conducted in accordance with USEPA Method 1631, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry*. See **Attachment A** of the permit for a Department report form for mercury test results.

j. Nitrogen: The USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards in marine waters, namely dissolved oxygen (DO) and marine life support. To date, the permittee has not conducted total nitrogen testing on its discharge. As of December 2018, the Department has 151 total nitrogen effluent values with an arithmetic mean of 19.1 mg/L collected from various municipally-owned treatment works that discharge to marine waters of the State. None of the facilities whose effluent data were used are specifically designed to remove total nitrogen. For the MEPDES permitting program, the Department considers 19.1 mg/L to be representative of total nitrogen discharge levels for all facilities providing secondary treatment that discharge to marine waters in the absence of facility specific data, and therefore 19.1 mg/L is being used as the total nitrogen discharge concentration from the Lincolnville Beach Sanitary Facility.

As of the date of this permitting action, the State of Maine has not promulgated numeric ambient water quality criteria for total nitrogen. According to several studies in USEPA's Region 1, numeric total nitrogen criteria have been established for relatively few estuaries, but the criteria that have been set typically fall between 0.35 mg/L and 0.50 mg/L to protect marine life using dissolved oxygen as the indicator. While the thresholds are site-specific, nitrogen thresholds set for the protection of eelgrass habitat range from 0.30 mg/L to 0.39 mg/L. Based on studies in USEPA's Region 1 and the Department's best professional judgment of thresholds that are protective of Maine water quality standards, the Department is utilizing a threshold of 0.45 mg/L for the protection of aquatic life in marine waters using dissolved oxygen as the indicator, and 0.32 mg/L for the protection of aquatic life using eelgrass as the indicator.

Two known surveys have been completed along the Lincolnville Beach shoreline to document presence/absence of eelgrass. The 1970's Timson (Maine Geological Survey) Coastal Marine Geological Environments information referenced in other Maine marine discharge permits is not being utilized for this permit due to deficiencies in the aerial imagery and groundtruthing methods used for eelgrass delineation. The eelgrass surveys considered in this permit were conducted in 1992 and 2004 by the Maine Department of Marine Resources, and documented eelgrass presence immediately surrounding the wastewater outfall in both years. The fringing eelgrass noted along the shoreline was similar in both years, and in 2004, was documented as moderate (40-70%) cover adjacent to the outfall. Based on this mapping history of eelgrass resource in the vicinity of the Lincolnville Beach outfall, the use of 0.32 mg/L as a total nitrogen threshold value for protection of eelgrass is appropriate for this receiving water.

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

With the exception of ammonia, nitrogen is not acutely toxic; thus, the Department is considering a far-field dilution to be more appropriate when evaluating impacts of total nitrogen to the marine environment. The permittee's facility has a chronic near-field dilution of 365:1. Far-field dilutions are generally significantly higher than the near-field dilution, depending on the location of the outfall pipe and nature of the receiving waterbody. The Lincolnville Beach outfall is located in Penobscot Bay, which is a very large and dynamic marine system. The far-field dilution for this facility is expected to be well in excess of 1,000:1. Using a conservative far-field dilution factor of 1,000:1, the estimated increase in total nitrogen concentration in the Lincolnville Beach discharge vicinity is estimated to be 0.019 mg/L.

The Department and external partners have been collecting ambient total nitrogen data along Maine's coast. No total nitrogen data are known to exist close to the shallow subtidal shoreline in the vicinity of Lincolnville Beach. In general, few data points exist along the exposed coastline of western Penobscot Bay where eelgrass is present in nearby shallow areas and upland development could contribute seasonally to stormwater nutrients. For a calculation of a background total nitrogen value, the Department has selected six sites from the exposed shoreline of western Penobscot Bay and islands, sampled in 2003 and 2015. The use of these six sites for the background total nitrogen calculation best approximates the ambient conditions likely to occur along Lincolnville Beach in the absence of the wastewater discharge. From these sites, the Department has calculated a mean background concentration of 0.16 ± 0.04 mg/L (n=6).

Based on the calculated ambient value for this receiving water, the estimated increase in ambient total nitrogen after reasonable opportunity for mixing in the far-field is 0.16 mg/L + 0.019 mg/L = 0.18 mg/L. The in-stream concentration value of 0.18 mg/L is considerably less than the Department and USEPA's best professional judgment based total nitrogen threshold of 0.32 mg/L for the protection of aquatic life using eelgrass as an indicator. Using the reasonable potential calculations above and in the absence of any information that the receiving water is not attaining standards, the Department is making a best professional judgment determination that the discharge of total nitrogen from the Lincolnville Beach facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SB waters. This permitting action is not establishing limitations or monitoring requirements for total nitrogen.

k. Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing:
38 M.R.S. § 414-A and 38 M.R.S. § 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. 06-096 CMR 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. *Surface Water Quality Criteria for Toxic Pollutants,* 06-096 CMR 584 sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters. 06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as, "…all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section.

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

Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedances of narrative or numerical water quality criteria." 06-096 CMR 530(2)(A) further specifies the criteria for the exemption of certain discharges from toxics testing as follows:

(1) Discharges from individual discharge points licensed to discharge less than 50,000 gallons per day of solely domestic wastewater and with a chronic dilution factor of at least 50 to 1, provided no holding tank wastes containing chemicals are accepted by the facility;

(2) Discharges from residential overboard discharge systems; or

(3) Discharges from combined sewer overflow discharge points, provided the owner of the sewerage system is conducting or participating in a discharge abatement program.

The permittee's facility is exempt from the 06-096 CMR 530 requirements as it permitted to discharge less than 50,000 gpd or solely domestic wastewater and the chronic dilution factor is greater than 50:1. However, should there be a substantial change in the characteristics of the discharge in the future; the Department may reopen this permit pursuant to Special Condition K, Reopening of Permit for Modifications, to incorporate the applicable whole effluent toxicity (WET), priority pollutant or analytical testing requirements cited above.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of West Penobscot Bay to meet standards for Class SB classification.

9. PUBLIC COMMENTS

Public notice of this application was made in the *Camden Herald* newspaper on or about December 6, 2018. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

Additional information concerning this permitting action may be obtained from, and written comments sent to:

Aaron Dumont
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 592-7161
e-mail: Aaron.A.Dumont@maine.gov

11. RESPONSE TO COMMENTS

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11. RESPONSE TO COMMENTS

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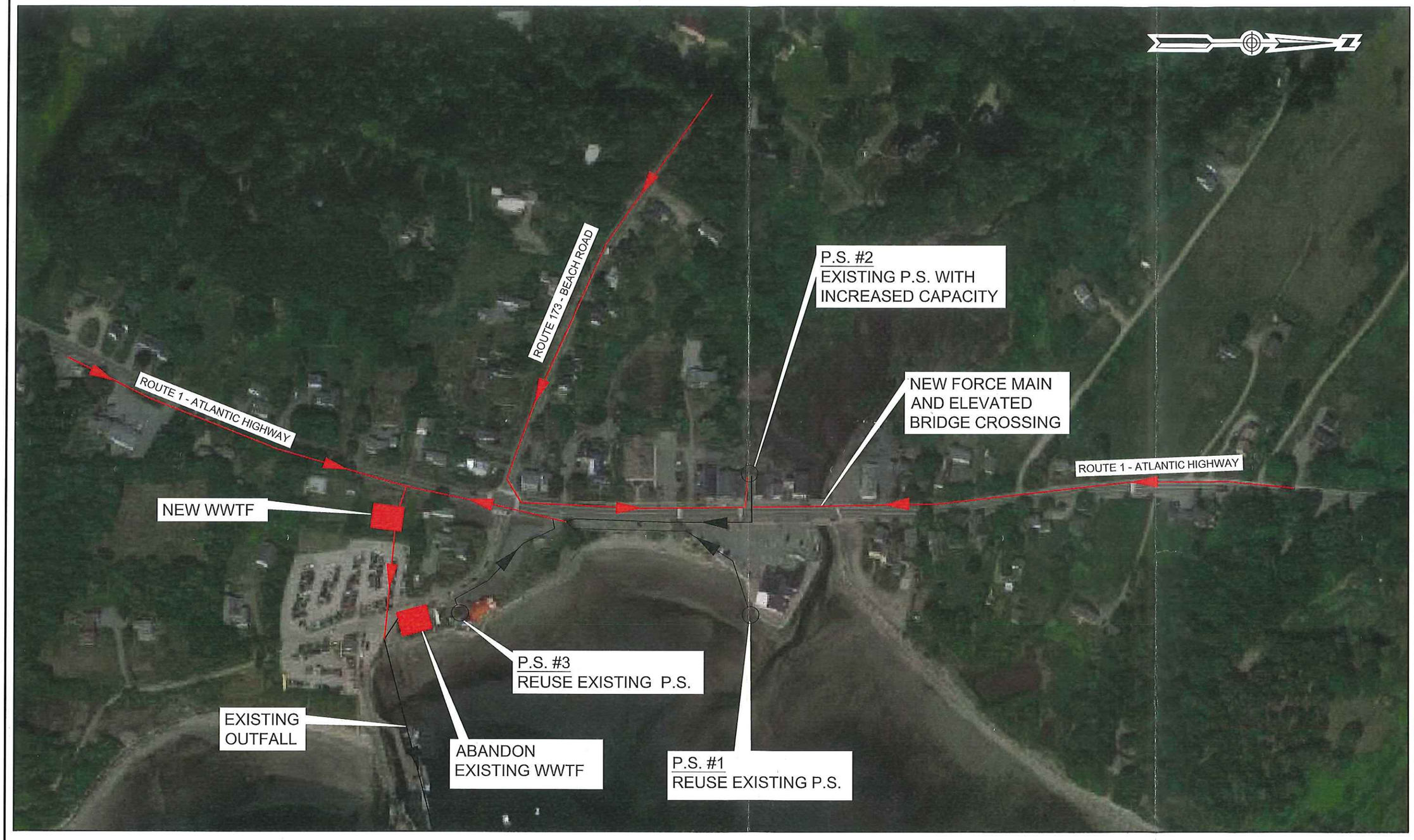
ATTACHMENT B



LEGEND

EXISTING COLLECTION SYSTEM

PROPOSED COLLECTION SYSTEM

41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com

WOODARD &CURRAN

COMMITMENT & INTEGRITY DRIVE RESULTS

COLLECTION SYSTEM
OVERVIEW

DESIGNED BY: JMP
DRAWN BY: JMP
CHECKED BY: RTP
ATTACHMENT B–COLLECTION*.dwg

LINCOLNVILLE SEWER DISTRICT
LINCOLNVILLE, ME

WASTEWATER COLLECTION
AND TREATMENT SYSTEM

JOB NO: 226733
DATE: DECEMBER 2018
SCALE: NTS

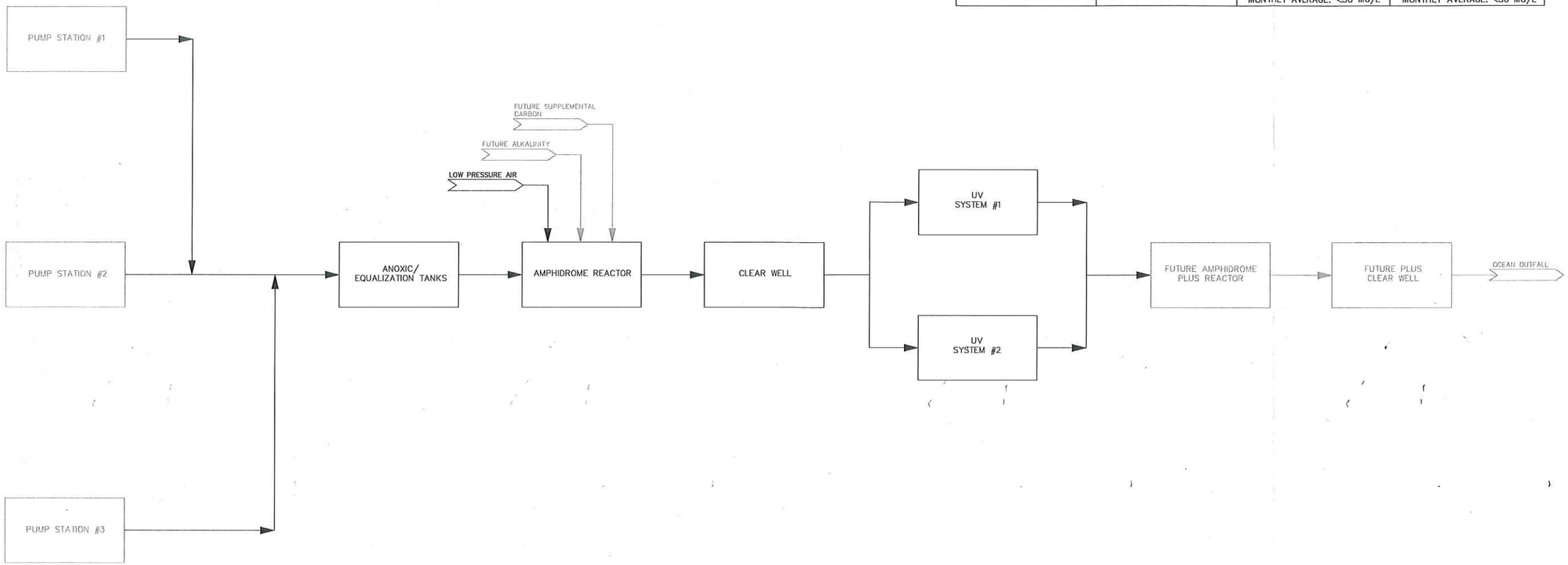
FIG. 1

ATTACHMENT A

22x34 SHEET
1:1

DESIGN FLOWS AND LOADINGS

PARAMETER	FLOW	BOD	TSS
RAW INFLUENT	AVERAGE DAY: 25,000 GPD MAXIMUM DAY: 38,000 GPD	AVERAGE DAY: 104 LB/D MAXIMUM DAY: 158 LB/D	AVERAGE DAY: 104 LB/D MAXIMUM DAY: 158 LB/D
EFFLUENT	----	DAILY MAXIMUM: <30 MG/L MONTHLY AVERAGE: <30 MG/L	DAILY MAXIMUM: <30 MG/L MONTHLY AVERAGE: <30 MG/L



ISSUE FOR BID

41 Hutchins Drive
Portland, Maine 04102
800.426.4262 | www.woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

REV	DESCRIPTION	DATE
	DESIGNED BY: JMP	CHECKED BY: RTP
	DRAWN BY: -	P-002.dwg

PROCESS & INSTRUMENTATION DIAGRAM - BLOCK FLOW DIAGRAM

LINCOLNVILLE SEWER DISTRICT
LINCOLNVILLE, MAINE

WASTEWATER COLLECTION AND TREATMENT SYSTEM

JOB NO.: 0226733.02
DATE: JANUARY 2019
SCALE: AS NOTED
SHEET: 30 OF 67

P-002