



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



MELANIE LOYZIM
COMMISSIONER

September 6, 2024

Mr. Stephen Aievoli
Superintendent
300 Lisbon Street
Lisbon Falls, ME. 04252

*Sent via electronic mail
Delivery confirmation requested*

RE: *Maine Pollutant Discharge Elimination System (MEPDES) Permit # ME0100307
Maine Waste Discharge License (WDL) Application #W002725-6D-N-R
Proposed Draft MEPDES Permit Renewal*

Dear Steve,

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.

All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business **October 7, 2024**. Failure to submit comments in a timely fashion will result in the proposed draft permit document being issued as drafted.

AUGUSTA
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AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826

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106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
(207) 764-0477 FAX: (207) 760-3143

Town of Lisbon
September 6, 2024
Page 2 of 2

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
Benjamin.S.Pendleton@Maine.gov

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

Sincerely,

Benjamin S Pendleton

Benjamin Pendleton
Division of Water Quality Management
Bureau of Water Quality
ph: 207-592-6871

Enc.

cc: James Knight, MEDEP
Bradley Kelso, MEDEP
Wendy Garland, MEDEP
Lori Mitchell, MEDEP
Laura Crossley, MEDEP
Sean Mahoney, CLF
Environmental Review, MEDMR
Michael Cobb, USEPA
Lynn Jennings, USEPA
Ellen Weitzler, USEPA
Alex Rosenberg, USEPA
Richard Carvalho, USEPA
Environmental Review, MEDIFW



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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF LISBON)	MAINE POLLUTANT DISCHARGE
LISBON, ANDROSCOGGIN COUNTY, MAINE)	ELIMINATION SYSTEM PERMIT
PUBLICLY OWNED TREATMENT WORKS)	AND
ME0100307)	WASTE DISCHARGE LICENSE
W002725-6D-N-R)	RENEWAL
APPROVAL)	

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

APPLICATION SUMMARY

On August 5, 2020, the permittee submitted a timely and complete application to the Department for the renewal of Waste Discharge License (WDL) #W002725-6D-M-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100307 (permit hereinafter), which was issued by the Department on December 2, 2015, for a five-year term. The December 2, 2015, permit authorized the permittee to discharge a monthly average discharge of 2.025 MGD of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Androscoggin River, Class B, in Lisbon, Maine.

PERMIT SUMMARY

This permit is carrying forward all the terms and conditions of the previous permit except it is:

1. Removing a 1/month monitoring and reporting requirement for *E coli* bacteria for the period December 2015 – April 2016 to assist the Maine Department of Marine Resources in its efforts to assess the impact of non-disinfected wastewater being discharged from municipal wastewater treatment facilities on shellfish harvesting areas at the mouth of the Kennebec River, as this sampling requirement was met during the previous permit cycle.
2. Establishing a seasonal monitoring requirement for *Escherichia coli* (*E. coli*) bacteria from April 15th – October 31st starting from the authorization date on this permit. This permit is also establishing monthly average limit not to exceed a geometric mean of 64 CFU or MPN per 100 milliliters and a daily maximum limit of 236 CFU or MPN per 100 milliliters instantaneous in accordance with *Standards for classification of fresh surface waters* 38 M.R.S. §465 (3)(B).

PERMIT SUMMARY

3. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 1, Sampling to the Department's most current requirements.
4. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 6, Mercury to the Department's most current requirements.
5. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 7, Whole Effluent Toxicity Testing to the Department's most current requirements.
6. Combining Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnotes 9, 10, and 11 into footnote 8 Analytical Chemistry and Priority Pollutant Testing.
7. Updating the Special Condition B, *Narrative Effluent Limitations*, to the Department's most current requirements.
8. Updated Special Condition L. (Monitoring and Reporting) to the Departments most current requirements.

CONCLUSIONS

Based on the findings summarized in the attached Fact Sheet dated September 6, 2024, 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 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 water 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 discharges 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).

ACTION

Based on the findings and conclusions as stated above, the Department APPROVES the above noted application of the TOWN OF LISBON to discharge a monthly average of 2.025 MGD of secondary treated wastewater to the Androscoggin River, Class B in Lisbon, 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 C.M.R. Ch. 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 _____ 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
For: MELANIE LOYZIM, Commissioner

Date of initial receipt of application: August 5, 2020

Date of application acceptance: August 20, 2020

Date filed with Board of Environmental Protection _____

This Order prepared by Benjamin Pendleton, Division of Water Quality Management

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001A** to the Androscoggin River. 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 <i>[50050]</i>	2.025 MGD <i>[03]</i>	---	Report MGD <i>[03]</i>	---	---	---	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>
Biochemical Oxygen Demand (BOD ₅) <i>[00310]</i>	507 lbs./day <i>[26]</i>	760 lbs./day <i>[26]</i>	845 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	2/Week <i>[02/07]</i>	Composite <i>[24]</i>
BOD ₅ % Removal ⁽²⁾ <i>[81010]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
Total Suspended Solids (TSS) <i>[00530]</i>	507 lbs./day <i>[26]</i>	760 lbs./day <i>[26]</i>	845 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	2/Week <i>[02/07]</i>	Composite <i>[24]</i>
TSS % Removal ⁽²⁾ <i>[81011]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
Settleable Solids <i>[00545]</i>	---	---	---	---	---	0.3 ml/L <i>[25]</i>	5/Week <i>[05/07]</i>	Grab <i>[GR]</i>
<i>E. coli</i> Bacteria ⁽³⁾ (April 15 – Oct. 31) <i>[31633]</i>	---	---	---	64/100 ml ⁽⁴⁾ <i>[13]</i>	---	236/100 ml ⁽⁴⁾ <i>[13]</i>	2/Week <i>[02/07]</i>	Grab <i>[GR]</i>
Total Residual Chlorine ⁽⁵⁾ <i>[50060]</i>	---	---	---	---	---	1.0 mg/L <i>[19]</i>	1/Day <i>[01/01]</i>	Grab <i>[GR]</i>
pH (Std. Units) <i>[00400]</i>	---	---	---	---	---	6.0 – 9.0 SU <i>[12]</i>	1/Day <i>[01/01]</i>	Grab <i>[GR]</i>
Mercury (Total) ⁽⁶⁾ <i>[71900]</i>	---	---	---	58.1 µg/L <i>[3M]</i>	---	87.1 µg/L <i>[3M]</i>	1/Year <i>[01/YR]</i>	Grab <i>[GR]</i>

The italicized numeric values bracketed in the table above and the tables that follow are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. **Footnotes:** See pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

1. The permittee is authorized to discharge **secondary treated municipal sanitary wastewater from Outfall #001A** to the Androscoggin River. Such discharges are limited and must be monitored by the permittee as specified below⁽¹⁾ **(cont'd)**:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Total Aluminum <i>[01105]</i>	1.4 lbs./day <i>[26]</i>	3.0 lbs./day <i>[26]</i>	Report µg/L <i>[28]</i>	Report µg/L <i>[28]</i>	1/Year <i>[01/YR]</i>	Composite <i>[24]</i>
Total Copper <i>[01042]</i>	---	0.68 lbs./day <i>[26]</i>	---	Report µg/L <i>[28]</i>	1/Year <i>[01/YR]</i>	Composite <i>[24]</i>
Total Lead <i>[01051]</i>	0.13 lbs./day <i>[26]</i>	---	Report µg/L <i>[28]</i>	---	1/Year <i>[01/YR]</i>	Composite <i>[24]</i>
Total Zinc <i>[01092]</i>	---	3.5 lbs./day <i>[26]</i>	---	Report µg/L <i>[28]</i>	1/Year <i>[01/YR]</i>	Composite <i>[24]</i>

The italicized numeric values bracketed in the table above and the tables that follow are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. **Footnotes:** See Pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

2. **SCREENING LEVEL TESTING** – Beginning in the calendar year 2024 and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement.

Effluent Characteristic	Daily Maximum	Minimum Frequency	Sample Type
Whole Effluent Toxicity⁽⁷⁾ <u>Acute – NOEL</u> <i>Ceriodaphnia dubia</i> (Water flea) [TDA3B] <i>Salvelinus fontinalis</i> (Brook trout) [TDA6F]	Report % [23]	1/ Year [01/YR]	Composite [24]
<u>Chronic – NOEL</u> <i>Ceriodaphnia dubia</i> (Water flea) [TBP3B] <i>Salvelinus fontinalis</i> (Brook trout) [TBQ6F]	Report % [23]	1/ Year [01/YR]	Composite [24]
Analytical Chemistry⁽⁸⁾ [51477]	Report µg/L [28]	1/ Quarter [01/90]	Composite/Grab [24]
Priority Pollutant⁽⁸⁾ [50008]	Report µg/L [28]	1/ Year [01/YR]	Composite/Grab [24]

The italicized numeric values bracketed in the table above and the tables that follow are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. **Footnotes:** See pages 8 through 11 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes:

1. Sampling –

Influent: Influent sampling must be conducted in the headworks building after the bar screen structure.

Effluent: Effluent sampling must be conducted at the outlet to the chlorine contact tank prior to the outfall structure entry.

The permittee must conduct 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 by the State of Maine's Department of Health and Human Services for wastewater. Samples that are sent to a POTW 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 C.M.R. Ch. 263 (Amended on March 15, 2023). 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 Discharge Monitoring Report.

In accordance with 40 CFR § 122.44(i)(1)(iv), the permittee must monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is "sufficiently sensitive" when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers either to 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 the following 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.

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. **Bacteria Limits** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between April 15 and October 31 of each year. The Department reserves the right to require year-round bacteria limits to protect the health, safety, and welfare of the public.

SPECIAL CONDITIONS

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

Footnotes:

4. ***E. coli* bacteria reporting** – The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results must be reported as such. Results must be expressed in CFU or MPN/100mL.
5. **TRC Monitoring** – 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 permit. 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 “NODI-9” for this parameter on the monthly DMR or “N9” if the submittal is an electronic DMR.
6. **Mercury** – The permittee must conduct all mercury monitoring required by this permit required to determine compliance with interim limitations established pursuant to 06-096 CMR 519 in accordance with the U.S. Environmental Protection Agency’s (USEPA) “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*. For the most up-to-date reporting form, go to https://www.maine.gov/dep/water/wd/municipal_industrial/index.html or (DEP website at [maine.gov/dep/index.html](https://www.maine.gov/dep/index.html), and search “wastewater reporting forms” and select “Whole Effluent Toxicity, Chemistry, and Mercury Reporting Forms” for a reporting form for mercury test results. Compliance with the monthly average limitation established in Special Condition A of this permit will be based on the cumulative arithmetic mean of all mercury tests results that were conducted utilizing sampling Method 1669 and analysis Method 1631E on file with the Department for this facility.
7. **Whole effluent toxicity (WET) testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 1.2% and 0.16%, respectively), which provides an estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points. The critical acute and chronic thresholds were derived as the mathematical inverse of the applicable modified acute and chronic dilution factors of 84:1 and 638:1, respectively.
 - a. **Surveillance level testing** – Waived pursuant to 06-096 C.M.R. Ch. 530 § 2(D)(3)(b).
 - b. **Screening level testing** - Beginning in the calendar year 2024 and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level acute and chronic WET testing on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*) at a minimum frequency of once per year (1/Year).

SPECIAL CONDITIONS

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

Footnotes:

Test results must be submitted to the Department not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department possible exceedances of the critical acute and chronic water quality thresholds of 1.0% and 0.25%, respectively.

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

- a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013.
- b. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

Results of WET tests must be reported on the “Whole Effluent Toxicity Report Fresh Waters” form each time a WET test is performed. The form can be found at:

https://www.maine.gov/dep/water/wd/municipal_industrial/index.html

The permittee must analyze the effluent for the analytical chemistry and priority pollutant parameters specified on the “WET and Chemical Specific Data Report Form” form each time a WET test is performed. The form can be found at:

https://www.maine.gov/dep/water/wd/municipal_industrial/index.html

8. **Analytical Chemistry and Priority Pollutant Testing** – Refers to those pollutants listed in their respective categories on the “WET and Chemical Specific Data Report Form” found at:

https://www.maine.gov/dep/water/wd/municipal_industrial/index.html

- a. **Surveillance level testing** – Waived pursuant to 06-096 C.M.R. Ch. 530 § (2)(D)(3)(b).
- b. **Screening level testing** – Beginning in the calendar year 2024 and every five years thereafter if a timely request for renewal has been made and the permit continues in force, or is replaced by a permit renewal containing this requirement, the permittee must conduct screening level analytical chemistry testing a minimum frequency of once per calendar quarter, and screening level priority pollutant testing at a minimum of once per year.

Testing must be conducted on samples collected at the same time as those collected for whole effluent toxicity tests. Priority pollutant and analytical chemistry testing must be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department.

SPECIAL CONDITIONS

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

Footnotes:

Test results must be submitted to the Department not later than the next DMR required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee must evaluate test results being submitted and identify to the Department, possible exceedances of the acute, chronic or human health Ambient Water Quality Criteria (AWQC) as established in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 C.M.R. Ch. 584 (effective February 16, 2020). For the purposes of DMR reporting, enter a "1" for yes, testing done this monitoring period or "N9" monitoring not required this period.

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, taste, 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.

C. TREATMENT PLANT OPERATOR

The person who has management responsibility over the treatment facility must hold a minimum of a Maine **Grade IV** certificate (or Registered Maine Professional Engineer) pursuant to *Sewerage Treatment Operators*, 32 M.R.S.A. §§ 4171-4182 and *Regulations for Wastewater Operator Certification*, 06-096 C.M.R. Ch. 531 (last amended July 24, 2023). 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

SPECIAL CONDITIONS

D. LIMITATIONS FOR INDUSTRIAL USERS (cont'd)

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 C.M.R. Ch. 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 August 20, 2020; 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.
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.

SPECIAL CONDITIONS

G. WET WEATHER FLOW MANAGEMENT PLAN

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

The plan shall conform to Department guidelines for such plans and shall include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events. The plan shall be kept on-site at all times and made available to Department and other regulatory personnel upon request. **The permittee shall review their plan annually** and record any necessary changes to keep the plan up to date.

H. OPERATION & MAINTENANCE (O&M) PLAN

The permittee shall maintain a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain the facility and all related 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 shall 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 shall be kept on-site at all times and made available to Department and other regulatory personnel upon request.

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

I. PUMP STATION EMERGENCY BYPASSES

Discharges from emergency bypass structures in pump stations are not authorized by this permit. The permittee shall monitor the pump stations listed below in accordance with an approved monitoring plan last amended December 2022, to determine the frequency and quantity (via measurement or estimation) of wastewater discharged from the bypass structures.

Discharges from the following pump stations shall be reported in accordance with Standard Condition B(5), *Bypasses*, and Special Condition E, *Authorized Discharges*, of this permit.

<u>Outfall #</u>	<u>Location</u>	<u>Receiving Water & Classification</u>
002	Davis Street Pump Station	Androscoggin River, Class B
003	Route 196 Pump Station	Sabattus River, Class B
004	Brook Street Pump Station	Sabattus River, Class B
005	D&B Street Pump Station	Sabattus River, Class B
006	Upland Road Pump Station	Sabattus River, Class B

SPECIAL CONDITIONS

J. STATEMENT FOR REDUCED/WAIVED TOXICS TESTING

In accordance with 06-096 C.M.R. Ch. 530 § 2(D)(4), and 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 Fact Sheet **Attachment E** 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.

- (a) Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and
- (b) Increases in the type or volume of transported (hailed) wastes accepted by the facility.

The Department may require that routine screening or 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.

K. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

Pursuant to this permit and *Standards for the Addition of Transported Wastes to Wastewater Treatment Facilities*, 06-096 C.M.R. Ch. 555 (effective March 9, 2009), during the effective period of this permit, the permittee is authorized to receive into the treatment process or solids handling stream up to a **daily maximum of 20,000 gpd** of transported wastes, subject to the following terms and conditions.

1. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.
2. Of the 20,000 gpd of transported wastes authorized by this permit, the permittee may introduce into the treatment process a daily maximum of 20,000 gpd of septage wastes.
3. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.

SPECIAL CONDITIONS

K. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY (cont'd)

4. At no time must the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility. Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream must be suspended until there is no further risk of adverse effects.
5. The permittee must maintain records for each load of transported wastes in a daily log which must include at a minimum the following.
 - (a) The date;
 - (b) The volume of transported wastes received;
 - (c) The source of the transported wastes;
 - (d) The person transporting the transported wastes;
 - (e) The results of inspections or testing conducted;
 - (f) The volumes of transported wastes added to each treatment stream; and
 - (g) The information in (a) through (d) for any transported wastes refused for acceptance.These records must be maintained at the treatment facility for a minimum of five years.
6. The addition of transported wastes into the treatment process or solids handling stream must not cause the treatment facilities design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream must be reduced or terminated in order to eliminate the overload condition.
7. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added must not be recorded as transported wastes but should be reported in the treatment facility's influent flow.
8. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current high flow management plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.
9. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.
10. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.

SPECIAL CONDITIONS

K. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY (cont'd)

11. The authorization in the Special Condition is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with 06-096 C.M.R. Ch. 555 and the terms and conditions of this permit.

L. 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 DMR to the regulatory agency utilizing the USEPA electronic system.

Electronic 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.

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Toxics reporting must be done using the Department 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.

M. 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 permit, 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.

SPECIAL CONDITIONS

N. 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: **SEPTEMBER 6, 2024**

PERMIT NUMBER: **ME0100307**

WASTE DISCHARGE LICENSE: **W002725-6D-N-R**

NAME AND ADDRESS OF APPLICANT: **TOWN OF LISBON
300 Lisbon Street
Lisbon Falls, Maine 04252**

COUNTY: **Androscoggin**

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

**TOWN OF LISBON
744 Lisbon Street
Lisbon Falls, Maine 04250**

RECEIVING WATER CLASSIFICATION: **Androscoggin River/Class B**

COGNIZANT OFFICIAL CONTACT INFORMATION:

**Mr. Stephen Aievoli, Superintendent
(207) 353-3013
SAievoli@lisbonme.org**

1. APPLICATION SUMMARY

- a. Application: On August 5, 2020, the Town of Lisbon (permittee) submitted a timely and complete application to the Department for the renewal of Waste Discharge License (WDL) #W002725-6D-M-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100307 (permit), which was issued by the Department on December 3, 2015, for a five-year term. The December 3, 2015, permit authorized the permittee to discharge a monthly average discharge of 2.025 MGD of secondary treated municipal wastewater from a publicly owned treatment works (POTW) to the Androscoggin River, Class B, in Lisbon, Maine.

- b. Source Description: The Town of Lisbon operates a municipal wastewater treatment facility on Lisbon Road in Lisbon Falls, Maine for the treatment of sanitary wastewater generated by a total of approximately 5,000 residential and light commercial customers located within the Town of Lisbon. The previous permit authorized the permittee to receive and introduce into the wastewater treatment process a maximum of up to 20,000 gallons per day (GPD) of transported wastes from local septage haulers based on an updated Transported Waste Management Plan submitted as an exhibit to its August 2020 application for permit renewal. All septic tank and holding tank wastes are introduced into the headworks of the facility consisting of a grit and screening apparatus. The sewer collection system is 100% separated (sanitary and storm water) and there are no combined sewer overflow (CSO) points associated with the system. The sanitary sewer collection system is approximately 35 miles in length and contains twelve (12) pump stations, including five (5) that currently have emergency overflow bypasses due to excessive inflow and infiltration (I/I) associated with older piping materials. Currently, three (3) of the 12 pump stations contain back-up power sources. A map showing the location of the wastewater treatment facility, and the receiving waters is included as Fact Sheet **Attachment A**.

- c. Wastewater Treatment: The Town of Lisbon Pollution Control Facility (PCF) has been online since January 1975 and provides a secondary level of wastewater treatment via a conventional activated sludge system. Influent flow is measured using ultrasonic flow meters and influent screening (primary treatment) is provided by way of a Lakeside® Auger System. Grit is collected in a hopper and hauled to a privately owned facility for final disposal via composting. Grease and rags are collected and hauled to the Lisbon transfer station for final disposal. Septage is introduced into the treatment system prior to the bar rack and grit removal structures in order to provide this waste stream with a primary level of treatment. Secondary treatment is provided through aeration and secondary clarification. The treatment system contains two (2) 310,500-gallon aeration basins fitted with diffused aeration. One of the basins is utilized for wastewater treatment while the other is utilized as an aerated sludge holding tank. Following aeration, the flow is conveyed to two (2) 2,376 square foot circular secondary clarifier basins fitted with interior weirs and surface skimmers. Scum is transferred to a hopper and from there to a biosolids holding tank. Secondary treated wastewater is conveyed to two chlorine contact tanks each measuring 42.5 feet long and 19 feet wide and each having a capacity of 24,800 gallons for disinfection using sodium hypochlorite. The permittee does not maintain a de-chlorination system at the facility.

Final effluent is conveyed for discharge to the Androscoggin River via a 16-inch diameter concrete outfall pipe that, based on information contained in the permittee's application, is submerged to a depth of approximately 3 feet below the surface of the water at mean low water. The outfall pipe is not fitted with diffusers or other mechanisms that would enhance mixing of the effluent with the receiving waters and the permittee has not provided information describing the mixing characteristics of the final effluent with the receiving waters.

1. APPLICATION SUMMARY (cont'd)

Sludge handling equipment at the facility includes, but is not limited to, a 150,000-gallon capacity biosolids holding tank and a centrifuge. Sludge is currently conveyed to one of the 310,500-gallon aeration basins for additional treatment. Sludge is now landfilled at the Juniper Ridge facility in Old Town. A process flow diagram submitted by the permittee is included as Fact Sheet **Attachment B**.

2. PERMIT SUMMARY

- a. Terms and Conditions: This permit is carrying forward all the terms and conditions of the previous permit except that this permit is:
 1. Removing the 1/month monitoring and reporting requirement for *E coli* bacteria for the period December 2015 – April 2016 to assist the Maine Department of Marine Resources in its efforts to assess the impact of non-disinfected wastewater being discharged from municipal wastewater treatment facilities on shellfish harvesting areas at the mouth of the Kennebec River, as this sampling requirement was met during the previous permit cycle.
 2. Establishing a seasonal monitoring requirement for *Escherichia coli (E. coli)* bacteria from April 15th – October 31st starting from the authorization date on this permit. This permit is also establishing monthly average limit not to exceed a geometric mean of 64 CFU or MPN per 100 milliliters and a daily maximum limit of 236 CFU or MPN per 100 milliliters instantaneous in accordance with *Standards for classification of fresh surface waters* 38 M.R.S. §465 (3)(B).
 3. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 1, Sampling to the Department's most current requirements.
 4. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 6, Mercury to the Department's most current requirements.
 5. Updating Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnote 7, Whole Effluent Toxicity Testing to the Department's most current requirements.
 6. Combining Special Condition A, *Effluent Limitations and Monitoring Requirements*, footnotes 9, 10, and 11 into footnote 8 Analytical Chemistry and Priority Pollutant Testing.
 7. Updating the Special Condition B, *Narrative Effluent Limitations*, to the Department's most current requirements.
 8. Updated Special Condition L. (Monitoring and Reporting) to the Departments most current requirements.

2. PERMIT SUMMARY (cont'd)

- b. History: The most relevant regulatory actions include:

September 10, 1999 – The Department issued WDL# W002725-68-G-N, for a five-year term.

September 29, 1999 – The US Environmental Protection Agency (USEPA) issued NPDES permit #ME0100307 to the permittee for the monthly average discharge of up to 2.025 MGD of secondary treated wastewater to the Androscoggin River. The 9/29/99 NPDES permit superseded the previous National Pollution Discharge Elimination System (NPDES) permit issued on September 22, 1995, and prior permits issued on September 28, 1990 (and associated permit modification issued on July 26, 1995), and June 27, 1985 (and associated permit modification issued on April 9, 1986).

January 27, 2000 – The Department issued WDL #W002725-5L-F-R, for a five-year term.

May 25, 2000 – The Department established interim effluent limits for mercury of 58.1 parts per trillion (ng/L) (average concentration) and 87.1 ng/L (maximum concentration).

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permitting program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program, and MEPDES permit #ME0100307 has been utilized for this facility. On March 26, 2011, the USEPA authorized the Department to administer the MEPDES program in Indian territories of the Penobscot Nation and Passamaquoddy Tribe.

March 3, 2005 – The permittee submitted a letter to the Department's Division of Engineering, Compliance and Technical Assistance (DECTA) requesting that the permittee be removed from the combined sewer overflow (CSO) program on the basis that the permittee had not experienced any wet weather related overflows in the five-year period leading up to March 2005.

March 21, 2005 – The Department's DECTA issued a letter to the permittee advising that the Town of Lisbon had been removed from the CSO program based on a lack of wet weather related overflows, continued inflow/infiltration mitigation, and repairs and upgrades of existing pump stations.

May 18, 2005 – The Department issued combination WDL #W002725-5L-H-R/ MEPDES Permit #ME0100307, for a five-year term.

April 10, 2006 – The Department amended the 5/18/05 WDL/MEPDES permit to incorporate testing requirements of 06-096 C.M.R. Ch. 530.

May 6, 2010 – The Department issued combination WDL # W002725-6D-I-R /MEPDES Permit #ME0100307 for a five-year term.

March 23, 2011 – The Department issued a minor permit revision to establish water quality based limitations for the following toxic pollutants that exceed or have a reasonable potential to exceed applicable ambient water quality criteria; inorganic arsenic, total aluminum, total lead, total copper and total zinc.

2. PERMIT SUMMARY (cont'd)

September 10, 2013 – The Department issued a permit modification to remove the monthly average limitations, monitoring requirements, reporting requirements and schedule of compliance for inorganic arsenic and total arsenic from the permit subsequent to the revision of the arsenic criteria water quality standards and the results of a statistical evaluation on arsenic data conducted on July 19, 2013.

March 13, 2015 – The permittee submitted a timely and complete General Application to the Department for renewal of the May 6, 2010, MEPDES permit. The application was accepted for processing on March 17, 2013, and was assigned WDL #W0002725-6D-M-R / MEPDES #ME0100307.

December 3, 2015 – The Department issued combination WDL # W002725-6D-M-R /MEPDES Permit #ME0100307 for a five-year term.

August 5, 2020 – The permittee submitted a timely and complete General Application to the Department for renewal of the August 4, 2020, MEPDES permit. The application was accepted for processing on March 17, 2013, and was assigned WDL #W0002725-6D-N-R / MEPDES #ME0100307.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S.A. § 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.A. § 420 and 06-096 C.M.R. Ch. 530 require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 C.M.R. Ch. 584 (last amended February 16, 2020), 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 major river basins, 38 M.R.S. § 467(1)(A)(3) classifies the main stem of the Androscoggin River from the Worumbo Dam in Lisbon Falls to a line formed by the extension of the Bath-Brunswick boundary across Merrymeeting Bay in a northwesterly direction, including the point of discharge, as a Class B waterway.

Standards for classification of fresh surface waters, 38 M.R.S. § 465(3) describes the standards for Class B waters as follows:

- A. *Class B waters must be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as habitat for fish and other aquatic life. The habitat must be characterized as unimpaired.*
- B. *Class B waters must be of sufficient quality to support all aquatic species indigenous to those waters without detrimental changes in the resident biological community. The dissolved oxygen content of*

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

Class B waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the one-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. Between April 15th and October 31st, the number of Escherichia coli bacteria in these waters may not exceed a geometric mean of 64 CFU per 100 milliliters over a 90-day interval or 236 CFU per 100 milliliters in more than 10% of the samples in any 90-day interval.

C. Discharges to Class B waters may not cause adverse impact to aquatic life in that the receiving waters must be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community.

(1-A) For the purpose of allowing the discharge of aquatic pesticides or chemicals approved by the department and conducted by the department, the Department of Inland Fisheries and Wildlife or an agent of either agency to restore resident biological communities affected by an invasive species, the department may find that the discharged effluent will not cause adverse impact to aquatic life as long as the materials and methods used do not cause a significant loss of any nontarget species and allow restoration of nontarget species. The department may find that an unavoidable, temporary loss of nontarget species does not constitute a significant loss of nontarget species.

(2) For the purpose of allowing the discharge of aquatic pesticides approved by the department for the control of mosquito-borne diseases in the interest of public health and safety, the department may find that the discharged effluent will not cause adverse impact to aquatic life as long as the materials and methods used provide protection for nontarget species. When the department issues a license for the discharge of aquatic pesticides authorized under this subparagraph, the department shall notify the municipality in which the application is licensed to occur and post the notice on the department's publicly accessible website.

5. REASONABLE POTENTIAL

Pursuant to 33 U.S.C. § 1311(b)(1)(C) and 40 C.F.R. § 122.44(d)(1), NPDES permits must contain any requirements in addition to technology based effluent limitations (TBELs) that are necessary to achieve water quality standards established under 33 U.S.C. § 1311(b)(1)(C). In addition, limitations “must control any pollutant or pollutant parameter (conventional, non-conventional, or toxic) which the permitting authority determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any water quality standard (WQS), including State narrative criteria for water quality.” 40 C.F.R. § 122.44(d)(1)(i). To determine if the discharge causes, or has the reasonable potential to cause, or contribute to an excursion above any WQS, EPA considers: 1) existing controls on point and non-point sources of pollution; 2) the variability of the pollutant or pollutant parameter in the effluent; 3) the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity); and 4) where appropriate, the dilution of the effluent by the receiving water. See 40 C.F.R. § 122.44(d)(1)(ii).

If the permitting authority determines that the discharge of a pollutant will cause, has the reasonable potential to cause, or contribute to an excursion above WQSs, the permit must contain water quality-based effluent limitations (WQBELs) for that pollutant. See 40 C.F.R. § 122.44(d)(1)(i)

6. RECEIVING WATER QUALITY CONDITIONS

The State of Maine Department of Environmental Protection 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the segment of the Androscoggin River (Assessment Unit ME0104000210_425R_01) main stem from the Little Androscoggin River to Pejepscot Dam as *Category 4-B: Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment*. Impairment in this context refers to a fish consumption advisory due to the presence of dioxin. The report also lists the Androscoggin River in the area of the discharges in *Category 5-D: Rivers and Streams Impaired by Legacy Pollutants*. Impairment in this context refers to the presence of Polychlorinated Biphenyls.

In addition, the report lists all freshwaters in Maine as “*Category 4-A: Waters Impaired by Atmospheric Deposition of Mercury*”. Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, “All freshwaters are listed in Category 4-A (Total Maximum Daily Load (TMDL) Completed) due to the USEPA approval of a Regional Mercury TMDL in December 2007. Maine has a fish consumption advisory for fish taken from all freshwaters due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury.

However, because it is impossible for someone consuming a fish to know whether the mercury level exceeds the action level, the Maine Department of Health and Human Services decided to establish a statewide advisory that recommends limits on consumption for all freshwater fish . Maine has already instituted statewide programs for removal and reduction of mercury sources. Pursuant to Maine law, 38 M.R.S. §420(1-B)(B), “*a facility is not in violation of the ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to section 413 subsection 11.*” The Department has established interim monthly average and daily maximum mercury concentration limits for this facility and the facility has been in substantial compliance with said interim discharge limits. See Section 7(j) of this Fact Sheet.

The Department is not aware of any information that indicates the discharges from the permittee are causing or contributing to the continuance of the fish consumption advisory.

7. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. Flow: The previous permit established, and this permit is carrying forward, a monthly average discharge flow limit of 2.025 MGD based on the design capacity for the treatment facility, and a daily maximum discharge flow reporting requirement.

A review of monthly Discharge Monitoring Report (DMR) data for the period January 2016 – December 2023 indicates values have been reported as follows:

Flow (DMRs = 95)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	2.025	0.36 – 1.34	0.68
Daily Maximum	Report	0.38 – 2.81	1.22

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

- b. Dilution Factors: The Department established applicable dilution factors for the discharge in accordance with freshwater protocols established in Department Rule 06-096 C.M.R. Ch. 530, Surface Water Toxics Control Program, March 21, 2012. With a monthly average discharge flow limit of 2.025 MGD, dilution factors associated with the discharge from the permittee may be calculated as follows:

$$1 \text{ cfs} = 0.6464 \text{ MGD}$$

$$\text{Acute: } 1Q10 = 1,036 \text{ cfs} \quad \Rightarrow \frac{(1,036 \text{ cfs})(0.6464) + 2.025 \text{ MGD}}{2.025 \text{ MGD}} = 332:1$$

$$\text{Modified Acute: } \frac{1}{4} 1Q10 = 259 \text{ cfs} \quad \Rightarrow \frac{(259 \text{ cfs})(0.6464) + 2.025 \text{ MGD}}{2.025 \text{ MGD}} = 84:1$$

$$\text{Chronic: } 7Q10 = 1,994 \text{ cfs} \quad \Rightarrow \frac{(1,994 \text{ cfs})(0.6464) + 2.025 \text{ MGD}}{2.025 \text{ MGD}} = 638:1$$

$$\text{Harmonic Mean} = 4,332 \text{ cfs} \quad \Rightarrow \frac{(4,332 \text{ cfs})(0.6464) + 2.025 \text{ MGD}}{2.025 \text{ MGD}} = 1,384:1$$

Department rule 06-96 C.M.R. Ch. 530 § 4(B)(1) states:

Analyses using numerical acute criteria for aquatic life must be based on 1/4 of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone and to ensure a zone of passage of at least 3/4 of the cross-sectional area of any stream as required by Chapter 581. Where it can be demonstrated that a discharge achieves rapid and complete mixing with the receiving water by way of an efficient diffuser or other effective method, analyses may use a greater proportion of the stream design flow, up to and including all of it, as long as the required zone of passage is maintained. Flows that allow bioaccumulation of compounds to levels that are toxic, carcinogenic, mutagenic or teratogenic are not to be used in setting effluent limits.

The permittee has not submitted data to the Department demonstrating that the effluent achieves complete and rapid mixing with the receiving waters. Therefore, the Department is utilizing the default stream flow of $\frac{1}{4}$ 1Q10 in acute evaluations in accordance with 06-096 C.M.R. Ch. 530.

- c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): The previous permit established, and this permit is carrying forward, monthly average and weekly average BOD₅ & TSS concentration limits of 30 mg/L and 45 mg/L, respectively, which were based on secondary treatment requirements as defined in Department rule, 06-096 C.M.R. Ch. 525 § 3(III).

The previous permit also established, and this permit is carrying forward, a daily maximum BOD₅ & TSS concentration limits of 50 mg/L based on a Department best professional judgement (BPJ) of best practicable treatment (BPT), and a minimum monitoring frequency requirement of two times per week.

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

Department rule 06-096 C.M.R. Ch. 523 § 6(f) states that all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass. The previous permit established monthly average, weekly average and daily maximum technology-based mass limits of 507 lbs./day, 760 lbs./day, and 845 lbs./day, respectively, which are being carried forward in this permit and were derived as follows:

Monthly Average Mass Limit: $(30 \text{ mg/L})(8.34 \text{ lbs./gallon})(2.025 \text{ MGD}) = 507 \text{ lbs./day}$
 Weekly Average Mass Limit: $(45 \text{ mg/L})(8.34 \text{ lbs./day})(2.025 \text{ MGD}) = 760 \text{ lbs./day}$
 Daily Maximum Mass Limit: $(50 \text{ mg/L})(8.34 \text{ lbs./day})(2.025 \text{ MGD}) = 845 \text{ lbs./day}$

A review of monthly DMR data for the period January 2016 – December 2023 indicates values have been reported as follows:

BOD₅ mass (DMRs = 95)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	507	7.4 - 122	48.21
Weekly Average	760	9-212	70.18
Daily Maximum	845	12 - 312	92.65

BOD₅ concentration (DMRs = 95)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	2 - 20	8.47
Weekly Average	45	2.20 - 39	11.72
Daily Maximum	50	3.10 - 45	14.50

TSS mass (DMRs = 95)

Value	Limit (lbs./day)	Range (lbs./day)	Mean (lbs./day)
Monthly Average	507	9 – 99	32.93
Weekly Average	760	13 - 238	50.59
Daily Maximum	845	14 - 426	69.75

TSS concentration (DMRs = 95)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	30	2.6 - 14	6.02
Weekly Average	45	2.8 - 23	8.72
Daily Maximum	50	2.9 - 34	11.78

This permit is carrying forward a requirement for a minimum of 85% removal of BOD₅ & TSS pursuant to 06-096 C.M.R. Ch. 525 § 3(III)(a&b)(3).

- d. Settleable Solids: The previous permit established, and this permit is carrying forward, a technology-based daily maximum concentration limit of 0.3 ml/L for settleable solids, which is considered BPT for secondary treated wastewater. The previous permit established, and this permit is carrying forward a minimum monitoring frequency of 5/week for Settleable Solids.

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

A review of monthly DMR data for the period January 2016 – December 2023 indicates values have been reported as follows:

Settleable solids concentration (DMRs = 95)

Value	Limit (ml/L)	Range (ml/L)	Mean (ml/L)
Daily Maximum	0.3	<0.02 – 0.2	<0.02

- e. *Escherichia coli* Bacteria: The previous permit established, seasonal (May 15-September 30 of each year) monthly average and daily maximum *E. coli* bacteria concentration limits of 126 colonies/100 ml and 949 colonies/100 ml, respectively. The monthly average concentration limit is based on 38 M.R.S.A. § 465(4) which requires that the *E. coli* bacteria of human and domestic animal origin in Class C waters may not exceed a geometric mean of 126 colonies/100 ml or an instantaneous level of 236 colonies/100 ml. The Department had determined that end-of-pipe limitations for the instantaneous concentration standard of 236 colonies/100 ml will be achieved through available dilution of the effluent with the receiving waters and need not be revised in MEPDES permits for facilities with adequate dilution.

This permit is establishing a seasonal monitoring requirement for *E. coli* bacteria from April 15th – October 31st starting from the authorization date on this permit. This permit is also establishing monthly average and daily maximum limits not to exceed a geometric mean of 64 CFU or MPN per 100 milliliters or 236 CFU or MPN per 100 milliliters instantaneous, in more than in accordance with *Standards for classification of fresh surface waters* §465 (3)(B). The previous permit established, and this permit is carrying forward a 2/week monitoring frequency for *E. coli* bacteria.

Although *E. coli* bacteria limits are seasonal and apply between April 15 and October 31 of each year, the Department reserves the right to impose year-round bacteria limits if deemed necessary to protect the health, safety and welfare of the public.

A review of monthly DMR data for the period January 2016 – December 2023 indicates values have been reported as follows:

***E. coli* bacteria (DMRs = 40)**

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	126	1 - 124	29.90
Daily Maximum	949	8.2 - 948	222.75

The previous permit established *E. coli* bacteria testing at a frequency of 1/Month during the non-summer months for one year beginning in the fall of 2015 at wastewater treatment plant (WWTP) outfalls in the upper Kennebec and Androscoggin Rivers. This monitoring was established in an effort to eliminate these point sources of pollution as the cause of a public health risk to shellfish harvest in the lower river. This permit is removing the testing requirement as it was fulfilled during the previous permit cycle.

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

- f. Total Residual Chlorine (TRC): The previous permit established a daily maximum technology-based concentration limit of 1.0 mg/L for TRC and a minimum monitoring frequency requirement of once per day. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department license/permits impose the more stringent of either a water quality based or BPT based limit. End-of-pipe water quality-based concentration thresholds may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	Modified A & C Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.019 mg/L	0.011 mg/L	84:1 (Mod A) 638:1 (C)	1.6 mg/L	7.0 mg/L

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. This permit is carrying forward the daily maximum technology-based concentration limit of 1.0 mg/L as it is more stringent than the calculated acute water quality-based concentration threshold of 1.6 mg/L. TRC monitoring must be performed during any period in which chlorine-based compounds are utilized for effluent disinfection. The permittee shall utilize approved test methods that are capable of bracketing the limitations in this permit.

A review of monthly DMR data for the period January 2016 – December 2023 indicates values have been reported as follows:

Total residual chlorine (DMRs = 41)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.72 – 1.0	0.95

The previous permit established, and this permit is carrying forward a 1/Day monitoring frequency to total residual chlorine.

- g. pH: The previous permit established, and this permit is carrying forward, a technology-based pH limit of 6.0 – 9.0 standard units (SU), which is based on 06-096 C.M.R. Ch. 525§ 3(III)(c), and a minimum monitoring frequency requirement of once per day.

A review of monthly DMR data for the period January 2016 – December 2023 indicates values have been reported as follows:

pH (DMRs = 95)

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	6.7	7.9

- h. Mercury: Pursuant to *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 420 and *Waste discharge licenses*, 38 M.R.S.A. § 413 and *Interim Effluent Limitations and Controls for the Discharge of Mercury*, 06-096 C.M.R. Ch. 519 (last amended October 6, 2001), the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

W002725-5L-F-R by establishing interim monthly average and daily maximum effluent concentration limits of 58.1 parts per trillion (ppt) and 87.1 ppt, respectively. The February 6, 2012, minor revision established, and this permit is carrying forward a 1/year monitoring frequency for mercury. It is noted the limitations have been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit.

38 M.R.S.A. § 420(1-B)(B)(1) provides that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department. A review of the Department’s data base for the period January 2016 through December 2023 indicates the permittee has been in compliance with the interim limits for mercury as results have been reported as follows:

Mercury (DMRs = 8)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Average	58.1	2.9 – 7.1	5.98
Daily Maximum	87.1	1.2 – 5.7	3.49

- i. Total Phosphorus: Prior phosphorus testing completed by the permittee yielded results lower than the reasonable potential threshold. The previous permit did not require end of pipe limits or monitoring requirements for total phosphorus. At this time the Department has determined that the conditions of the previous permit will carry forward, and there will not be monitoring requirements, or a mass limit established for total phosphorus.

The Department reserves the right to reopen this permit for modification if there are changes in the operation of the facility or waste stream that would lead to a greater likelihood that the permittee would have a reasonable potential to exceed the ambient water quality criteria (AWQC) for phosphorus.

- j. Whole Effluent Toxicity (WET) & Chemical-Specific Testing: Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 C.M.R. Ch. 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth AWQC for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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

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

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

06-096 C.M.R. Ch. 530 establishes four categories of testing requirements based predominately on the chronic dilution factor. The categories are as follows:

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

Department rule 06-096 C.M.R. Ch. 530 § 2(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the permittee’s facility falls into the Level III frequency category as the facility has a chronic dilution factor ≥100:1 but <500:1 and Q ≥1.0 MGD. 06-096 C.M.R. Ch. 530 § 2(D)(1) specifies that routine surveillance and screening level testing requirements are as follows:

Screening level testing

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

Surveillance level testing

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

Department rule 06-096 C.M.R. Ch. 530 § 2(D)(3)(b) states dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedances.

A review of the data on file with the Department for the permittee indicates that to date, it has fulfilled the WET and chemical-specific testing requirements of Chapter 530. See **Attachment C** of this Fact Sheet for a summary of the WET test results and **Attachment D** of this Fact Sheet of the analytical chemistry and priority pollutant test dates and numeric results for parameters of concern.

WET Evaluation

06-096 C.M.R. Ch. 530 § 3(E) states:

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

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

On September 19, 2023, the Department conducted a statistical evaluation on the most recent 60 months of WET test results on file with the Department in accordance with the statistical approach outlined above. The September 19, 2023 statistical evaluation indicates the discharge from the permittee's facility has not demonstrated a reasonable potential to exceed the critical modified acute or chronic ambient water quality thresholds of 1.2% and 0.16% respectively, for the water flea or the brook trout.

06-096 C.M.R. Ch. 530 § 2(D)(3)(c) states, in part, *“Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E).”* Based on the provisions of 06-096 C.M.R. Ch. 530, surveillance level WET testing is being waived. This permit is carrying forward the routine screening level WET testing requirements as specified in the table above and 06-096 C.M.R. Ch. 530 § 2(D).

06-096 C.M.R. Ch. 530 § 2(D)(4) 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.”*

This permit is carrying forward the notification requirement as Special Condition J, pursuant to 06-096 C.M.R. Ch. 530 § 2(D)(4). This permit provides for reconsideration of testing requirements, including the imposition of certain testing, in consideration of the nature of the wastewater discharged, existing wastewater treatment, receiving water characteristics, and results of testing.

Chemical specific evaluation

On November 21, 2023, the Department conducted a statistical evaluation, Report 1372, of the most recent 60 months of chemical-specific test results on file with the Department. The evaluation indicated there are no exceedances or reasonable potential to exceed critical applicable AWQC thresholds for any of the four chemical specific parameters limited in the December 3, 2015, permit. Past practice has been to eliminate the limits for total aluminum, total copper, total lead and total zinc based on the new test results collected between December 2015 and the present. The USEPA has objected to this practice stating it violates the anti-backsliding provisions in federal rules as new test results obtained during the most current 60 months does not qualify for the anti-backsliding provision of “new information that was not available at the time of the previous permit.”

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

The previous permit established, and this permit is carrying forward water quality-based mass limitations and monitoring requirements for total aluminum, total copper, total lead, and total zinc at a monitoring frequency of 1/year.

A review of monthly DMR data for the period January 2016 – December 2023 indicates values have been reported as follows:

Aluminum mass (DMRs = 8)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	1.4	0.03 – 0.24	0.11
Daily Maximum	3.0	0.02 – 0.25	0.12

Aluminum concentration (DMRs = 8)

Value	Limit (ug/L)	Range (ug/L)	Mean (ug/L)
Monthly Average	<i>Report</i>	8 - 36	21.25
Daily Maximum	<i>Report</i>	8 – 36	21.25

Copper mass (DMRs = 8)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	---	---	---
Daily Maximum	.68	0 - 0.18	0.060

Copper concentration (DMRs = 8)

Value	Limit (ug/L)	Range (ug/L)	Mean (ug/L)
Monthly Average	---	---	---
Daily Maximum	<i>Report</i>	0 - 18	6.4

Lead mass (DMRs = 8)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	0.13	0.0-0.03	0.013
Daily Maximum	---	---	---

Lead concentration (DMRs = 8)

Value	Limit (ug/L)	Range (ug/L)	Mean (ug/L)
Monthly Average	<i>Report</i>	0 – 4.1	2.89
Daily Maximum	---	---	---

Zinc mass (DMRs = 8)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Monthly Average	---	---	---
Daily Maximum	3.5	0.3 - 1.23	0.62

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

Zinc concentration (DMRs = 8)

Value	Limit (ug/L)	Range (ug/L)	Mean (ug/L)
Monthly Average	---	---	---
Daily Maximum	<i>Report</i>	85 – 180	127

The limitations carried forward in this permit were calculated in the December 3, 2015, permit as follows:

Aluminum

Mean concentration = 75 ug/L or 0.075 mg/L

Permit flow limit = 2.025 MGD

Historical average mass = (0.075 mg/L)(8.34)(2.025 MGD) = 1.26 lbs/day

The July 15, 2015, statistical evaluation (Report ID #793) indicates the historical average mass of aluminum discharged by the permittee (1.26 lbs/day) is 0.20 % of the aluminum discharged by facilities on the main stem of the Androscoggin River. The chronic assimilative capacity (AC) at Brunswick was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flows (7Q10 = 1,715 cfs) at Brunswick less the assimilative capacity allocated to Whitney Brook in Canton (critical low flow 7Q10 = 20 cfs), to Seven Mile Stream in Jay (critical low flow 7Q10 = 2 cfs) to the Little Androscoggin River in Mechanic Falls (critical low flow 7Q10 = 32.5 cfs) and the Sabattus River at Sabattus (critical low flow 7Q10 = 2.5 cfs). The calculation for aluminum is as follows:

Chronic:

7Q10 at Brunswick = 1,715 cfs or 1,109 MGD

7Q10 at Canton = 20 cfs or 12.9 MGD

7Q10 at Jay = 2 cfs or 1.29 MGD

7Q10 at Mechanic Falls = 32.5 cfs or 20.9 MGD

7Q10 at Sabattus = 2.5 cfs or 1.6 MGD

AWQC = 87 ug/L

87 ug/L(0.90) = 78.3 ug/L or 0.0783 mg/L

Chronic AC = 1,109 MGD – 12.9 MGD – 1.29 MGD – 20.9 MGD – 1.6 MGD = 1,072 MGD

(1,072 MGD)(8.34 lbs/gal)(0.0783 mg/L) = 700 lbs/day

Therefore, the chronic mass segment allocations for aluminum for the permittee can be calculated as follows:

Monthly average mass for aluminum:

(Chronic assimilative capacity mass)(% of total aluminum discharged)

(700 lbs/day)(0.0020) = **1.4 lbs/day**

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

The acute assimilative capacity (AC) at Brunswick was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flows (1Q10 = 451 cfs) at Brunswick less the assimilative capacity allocated to Whitney Brook in Canton (critical low flows 1Q10 = 20 cfs), to Seven Mile Stream in Jay (critical low flows 1Q10 = 2 cfs), to the Little Androscoggin River in Mechanic Falls (critical low flows 1Q10 = 15.3 cfs) and the Sabattus River at Sabattus (critical low flow 1Q10 = 2.5 cfs). The calculation for aluminum is as follows:

Acute:

1Q10 at Brunswick = 451 cfs or 292 MGD
1Q10 at Canton = 20 cfs or 12.9 MGD
1Q10 at Jay = 2 cfs or 1.29 MGD
1Q10 at Mechanic Falls = 15.3 cfs or 9.89 MGD
1Q10 at Sabattus = 2.5 cfs or 1.6 MGD

AWQC = 750 ug/L
750 ug/L(0.90) = 675 ug/L or 0.675 mg/L

Acute AC = 292 MGD – 12.9 MGD – 1.29 MGD – 9.89 MGD – 1.6 MGD = 266 MGD

(266 MGD)(8.34 lbs/gal)(0.675 mg/L) = 1,497 lbs/day

Therefore, the acute mass segment allocations for aluminum for the permittee can be calculated as follows:

Daily maximum mass for aluminum:

(Acute assimilative capacity mass)(% of total aluminum discharged)
(1,497 lbs/day)(0.0020) = **3.0 lbs/day**

Copper

Mean concentration = 23.7 ug/L or 0.0237 mg/L
Permit flow limit = 2.025 MGD
Historical average mass = (0.0237 mg/L)(8.34)(2.025 MGD) = 0.40 lbs/day

The July 15, 2015, statistical evaluation (Report ID #793) indicates the historical average mass of copper discharged by the permittee (0.40 lbs/day) is 11.04 % of the copper discharged by facilities on the main stem of the Androscoggin River. The acute assimilative capacity (AC) at Brunswick was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flows (1Q10 = 451 cfs) at Brunswick less the assimilative capacity allocated to Whitney Brook in Canton (critical low flows 1Q10 = 20 cfs), to Seven Mile Stream in Jay (critical low flows 1Q10 = 2 cfs), to the Little Androscoggin River in Mechanic Falls (critical low flows 1Q10 = 15.3 cfs) and the Sabattus River at Sabattus (critical low flow 1Q10 = 2.5 cfs). The calculation for copper is as follows:

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Acute:

1Q10 at Brunswick = 451 cfs or 292 MGD
1Q10 at Canton = 20 cfs or 12.9 MGD
1Q10 at Jay = 2 cfs or 1.29 MGD
1Q10 at Mechanic Falls = 15.3 cfs or 9.89 MGD
1Q10 at Sabattus = 2.5 cfs or 1.6 MGD

AWQC = 3.07 ug/L
3.07 ug/L(0.90) = 2.76 ug/L or 0.00276 mg/L

Acute AC = 292 MGD – 12.9 MGD – 1.29 MGD – 9.89 MGD – 1.6 MGD = 266 MGD

(266 MGD)(8.34 lbs/gal)(0.00276 mg/L) = 6.12 lbs/day

Copper

Acute

Therefore, the acute mass segment allocations for copper for the permittee can be calculated as follows:

Daily maximum mass for copper:

(Acute assimilative capacity mass)(% of total copper discharged)
(6.12 lbs/day)(0.1104) = **0.68 lbs/day**

Lead

Mean concentration = 2.5 ug/L or 0.0025 mg/L
Permit flow limit = 2.025 MGD
Historical average mass = (0.0025 mg/L)(8.34)(2.025 MGD) = 0.043 lbs/day

The July 15, 2015, statistical evaluation (Report ID #793) indicates the historical average mass of lead discharged by the permittee (0.043 lbs/day) is 3.98 % of the lead discharged by facilities on the main stem of the Androscoggin River. The chronic assimilative capacity (AC) at Brunswick was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flows (7Q10 = 1,715 cfs) at Brunswick less the assimilative capacity allocated to Whitney Brook in Canton (critical low flow 7Q10 = 20 cfs), to Seven Mile Stream in Jay (critical low flow 7Q10 = 2 cfs), to the Little Androscoggin River in Mechanic Falls (critical low flow 7Q10 = 32.5 cfs) and to the Sabattus River at Sabattus (critical low flow 7Q10 = 2.5 cfs). The calculation for lead is as follows:

Chronic:

7Q10 at Brunswick = 1,715 cfs or 1,109 MGD
7Q10 at Canton = 20 cfs or 12.9 MGD
7Q10 at Jay = 2 cfs or 1.29 MGD
7Q10 at Mechanic Falls = 32.5 cfs or 20.9 MGD

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

7Q10 at Sabattus = 2.5 cfs or 1.6 MGD

AWQC = 0.41 ug/L

0.41 ug/L(0.90) = 0.37 ug/L or 0.00037 mg/L

Chronic AC = 1,109 MGD – 12.9 MGD – 1.29 MGD – 20.9 MGD – 1.6 MGD = 1,072 MGD

(1,072 MGD)(8.34 lbs/gal)(0.00037 mg/L) = 3.31 lbs/day

Therefore, the chronic mass segment allocations for lead for the permittee can be calculated as follows:

Monthly average mass for lead:

(Chronic assimilative capacity mass)(% of total lead discharged)

(3.31 lbs/day)(0.0398) = **0.13 lbs/day**

Zinc

Mean concentration = 118 ug/L or 0.118 mg/L

Permit flow limit = 2.025 MGD

Historical average mass = (0.118 mg/L)(8.34)(2.025 MGD) = 2.0 lbs/day

The July 15, 2015, statistical evaluation (Report ID #793) indicates the historical average mass of zinc discharged by the permittee (2.0 lbs/day) is 5.75 % of the zinc discharged by facilities on the main stem of the Androscoggin River. The acute assimilative capacity (AC) at Brunswick was calculated based on 90% of the applicable AWQC (taking into consideration the 10% reduction to account for background, 0% reduction for reserve, totaling 10%), critical low flows (1Q10 = 451 cfs) at Brunswick less the assimilative capacity allocated to Whitney Brook in Canton (critical low flows 1Q10 = 20 cfs), to Seven Mile Stream in Jay (critical low flows 1Q10 = 2 cfs) to the Little Androscoggin River in Mechanic Falls (critical low flows 1Q10 = 15.3 cfs) and to the Sabattus River (critical low flow 1Q10 = 2.5 cfs). The calculation for zinc is as follows:

Acute:

1Q10 at Brunswick = 451 cfs or 292 MGD

1Q10 at Canton = 20 cfs or 12.9 MGD

1Q10 at Jay = 2 cfs or 1.29 MGD

1Q10 at Mechanic Falls = 15.3 cfs or 9.89 MGD

1Q10 at Sabattus = 2.5 cfs or 1.6 MGD

AWQC = 30.6 ug/L

30.6 ug/L(0.90) = 27.5 ug/L or 0.0275 mg/L

Acute AC = 292 MGD – 12.9 MGD – 1.29 MGD – 9.89 MGD – 1.6 MGD = 266 MGD

(266 MGD)(8.34 lbs/gal)(0.0275 mg/L) = 61.0 lbs/day

Therefore, the acute mass segment allocations for zinc for the permittee can be calculated as follows:

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

Daily maximum mass for zinc:

(Acute assimilative capacity mass)(% of total zinc discharged)
(61.0 lbs/day)(0.0575) = **3.5 lbs/day**

06-096 C.M.R. Ch. 530 does not establish monitoring frequencies. Monitoring frequencies are established on case-by-case basis given the timing, severity and frequency of occurrences of the exceedances or reasonable potential to exceed applicable critical water quality thresholds. Therefore, this permit is making a best professional judgment to establish the monitoring frequencies for aluminum, copper, lead and zinc at the routine surveillance level frequency of 1/Year specified in 06-096 C.M.R. Ch. 530.

06-096 C.M.R. Ch. 530 § 2(D)(3)(c) states, in part, “*Dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedance as calculated pursuant to section 3(E).*” Based on the provisions of 06-096 C.M.R. Ch. 530, surveillance level analytical chemistry testing is being waived. As with WET testing, this permit is carrying forward the notification requirement in this permit as Special Condition J, pursuant to 06-096 C.M.R. Ch. 530 § 2(D)(4).

8. DISPOSAL OF SEPTAGE WASTE IN WASTEWATER TREATMENT FACILITY

The previous permit authorized the permittee to receive and introduce up to 20,000 gpd of transported wastes into the wastewater treatment process or solids handling stream. Department rule Chapter 555, *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, limits the quantity of transported wastes received at a facility to 1% of the design capacity of the treatment facility if the facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility does not utilize the side stream or storage method of introduction into the influent flow. A facility may receive more than 1% of the design capacity on a case-by-case basis. The permittee has requested the Department carry forward the daily quantity of 20,000 gpd of transported wastes that it is authorized to receive and treat as it utilizes the side stream/storage method of metering transported wastes into the facility’s influent flow. With a design capacity of 2.025 MGD, 20,000 gpd represents 1.0% of said capacity.

The Department has determined that under normal operating conditions, the receipt and treatment of 20,000 gpd of transported wastes to the facility will not cause or contribute to upset conditions of the treatment process.

9. ANTI-BACKSLIDING

Federal regulation 40 CFR, §122.44(l) contains the criteria for what is often referred to as the anti-backsliding provisions of the Federal Water Pollution Control Act (Clean Water Act). In general, the regulation states that, effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit, except for provisions specified in the regulation. Applicable exceptions include (1) material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation and (2) information is available which was not available at the time of the permit issuance (other than revised regulations, guidance, or test methods) and which would justify the application of less stringent effluent limitations at the time of permit issuance. All limitations in this permit are equally or more stringent than the previous permit.

10. ANTI-DEGREDAATION

The Department has made a best professional judgment determination based on information gathered to date, that as permitted, the discharge will not cause or contribute the failure of the Androscoggin River to meet the standards for Class B classification and the designated uses of the waterbody will continue to be maintained and protected.

11. PUBLIC COMMENTS

Public notice of this application was made in the *Lewiston Sun Journal* newspaper on or about August 2, 2020. 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 C.M.R. Ch. 522 (effective January 12, 2001).

12. DEPARTMENT CONTACTS

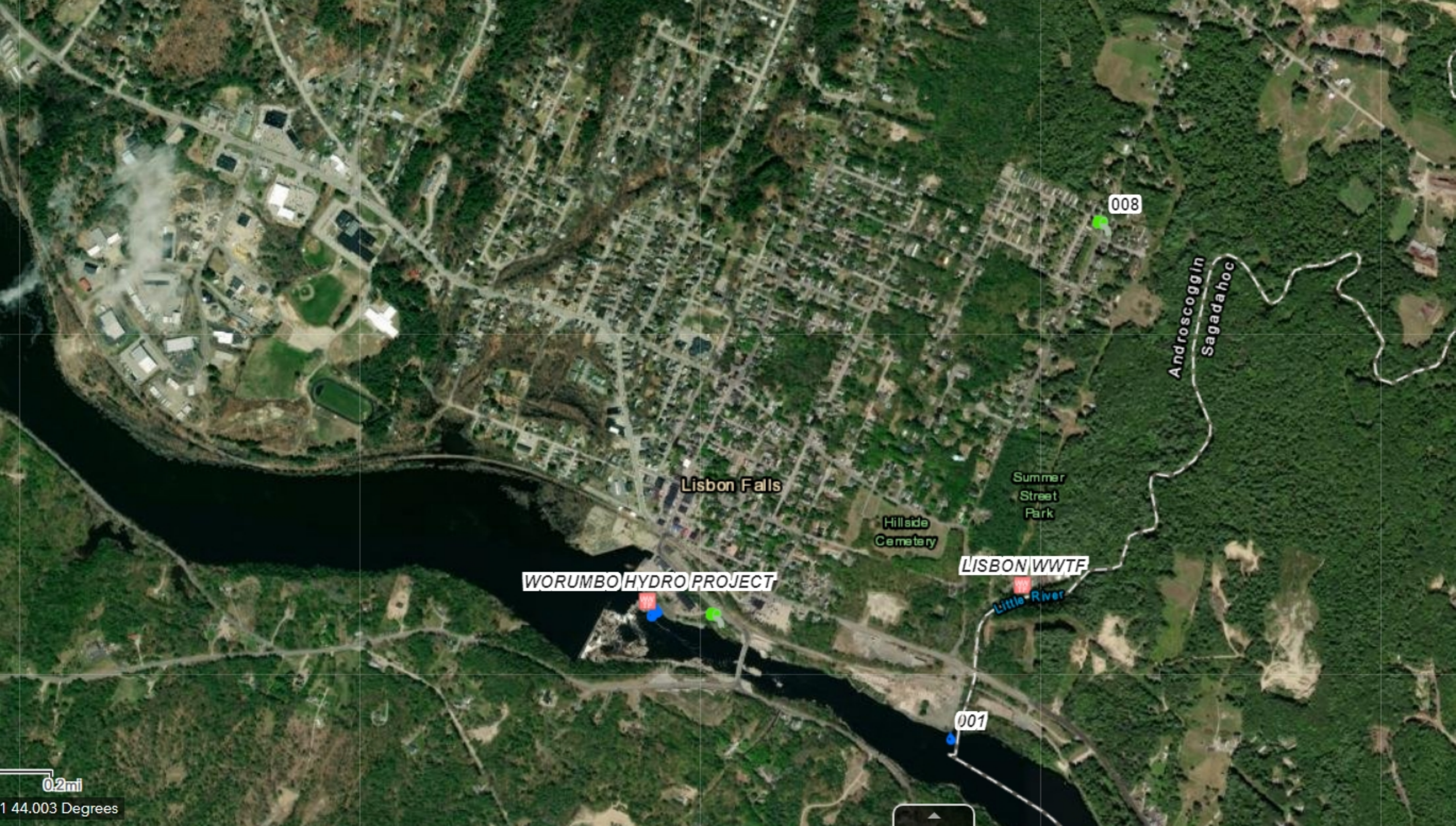
Additional information concerning this permit may be obtained from, and written comments sent to:

Benjamin Pendleton
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 592-6871
e-mail: benjamin.s.pendleton@maine.gov

11. RESPONSE TO COMMENTS

This space is reserved until the end of the formal thirty-day comment period.

FACT SHEET ATTACHMENT A



WORUMBO HYDRO PROJECT

Lisbon Falls

Hillside Cemetery

Summer Street Park

LISBON WWTF

Little River

Androscoggin Sagadahoc

008

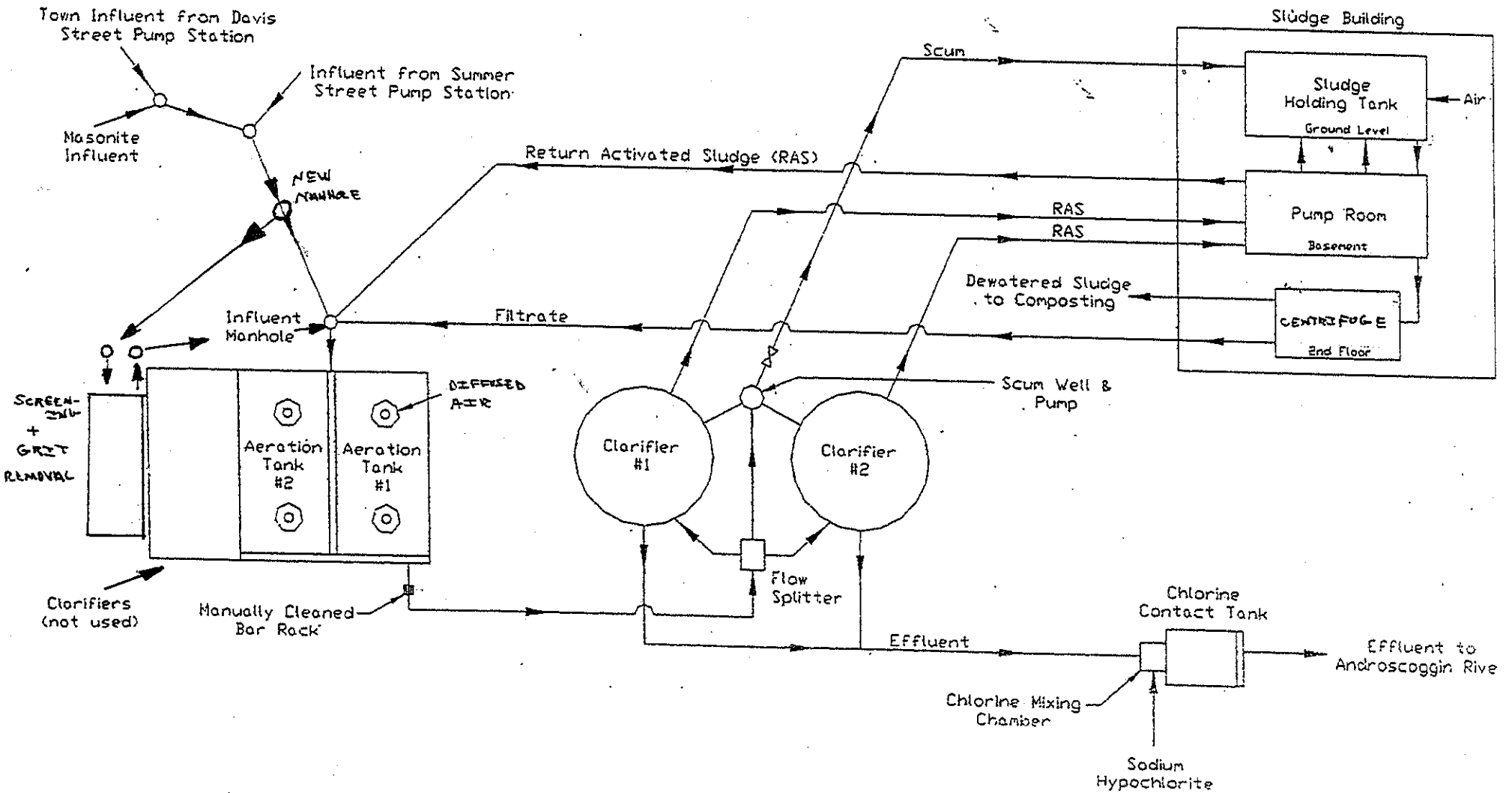
001

0.2mi

44.003 Degrees

FACT SHEET ATTACHMENT B

WWTF PROCESS FLOW SCHEMATIC LISBON, MAINE WWTF



FACT SHEET ATTACHMENT C

FACILITY WET EVALUATION REPORT



Facility:	LISBON WWTP	Permit Number:	ME0100307	Report Date:	7/17/2024
Receiving Water:	ANDROSCOGGIN RIVER			Rapidmix:	N
Dilution Factors:	1/4 Acute: 83.6769	Acute:	331.708	Chronic:	637.5167
Effluent Limits:	Acute (%): 1.206	Chronic (%): 0.157	Date range for Evaluation: From	16/Jul/2019	To: 16/Jul/2024

Test Type: A_NOEL

Test Species: TROUT	Test Date	Result (%)	Status
	12/09/2019	100.000	OK

Species Summary:

Test Number: 1	RP: 6.200	Min Result (%): 100.000	RP factor (%): 16.129	Status: OK
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Test Type: C_NOEL

Test Species: TROUT	Test Date	Result (%)	Status
	12/09/2019	100.000	OK

Species Summary:

Test Number: 1	RP: 6.200	Min Result (%): 100.000	RP factor (%): 16.129	Status: OK
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Test Type: A_NOEL

Test Species: WATER FLEA	Test Date	Result (%)	Status
	12/09/2019	100.000	OK

Species Summary:

Test Number: 1	RP: 6.200	Min Result (%): 100.000	RP factor (%): 16.129	Status: OK
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Test Type: C_NOEL

Test Species: WATER FLEA	Test Date	Result (%)	Status
	12/09/2019	100.000	OK

Species Summary:

Test Number: 1	RP: 6.200	Min Result (%): 100.000	RP factor (%): 16.129	Status: OK
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FACT SHEET ATTACHMENT D

CHEMICAL TEST REPORT

Data entered into Toxscan for the period

21/nov/2018 - 21/nov/2023



Facility Name: LISBON WWTP

Permit Number: ME0100307

ALKALINITY

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	54000.000	N	

ALUMINUM

Test Date	Result (ug/l)	Lsthan	Status
02/12/2019	36.000	N	
05/05/2019	37.000	N	
08/05/2019	80.000	N	
11/08/2019	31.000	N	
12/10/2019	21.000	N	
10/04/2021	8.000	N	
08/01/2022	38.000	N	
11/01/2023	51.000	N	

AMMONIA

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	2000.000	N	
08/05/2019	600.000	N	
11/08/2019	2600.000	N	

CADMIUM

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	0.700	N	

COPPER

Test Date	Result (ug/l)	Lsthan	Status
02/12/2019	14.000	N	
05/05/2019	14.000	N	
08/05/2019	10.000	N	
11/08/2019	8.000	N	
12/10/2019	18.000	N	
08/01/2022	12.000	N	
11/01/2023	34.000	N	

LEAD

Test Date	Result (ug/l)	Lsthan	Status
12/10/2019	4.000	N	

MERCURY

Test Date	Result (ng/l)	Lsthan	Status
12/10/2019	5.700	N	
04/05/2021	4.180	N	
08/01/2022	1.200	N	
11/01/2023	2.900	N	

PH

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	6.820	N	

SOLIDS

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	500000.000	N	

SPECIFIC CONDUCTANCE (UMHOS)

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	860.000	N	

TOTAL CALCIUM

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	33000.000	N	

TOTAL HARDNESS

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	110000.000	N	

TOTAL MAGNESIUM

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	5900.000	N	

TOTAL ORGANIC CARBON

Test Date	Result (ug/l)	Lsthan	Status
05/05/2019	7900.000	N	

ZINC

Test Date	Result (ug/l)	Lsthan	Status
02/12/2019	86.000	N	
05/05/2019	52.000	N	
08/05/2019	110.000	N	
11/08/2019	77.000	N	
12/10/2019	130.000	N	
10/04/2021	130.000	N	
08/01/2022	110.000	N	
11/01/2023	120.000	N	

FACT SHEET ATTACHMENT E

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES# _____ Facility Name _____

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

Test Conducted	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
WET Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Priority Pollutant Testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analytical Chemistry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other toxic parameters ¹	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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