STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JANET T. MILLS
GOVERNOR

MELANIE LOYZIM
COMMISSIONER

February 4, 2026

Mr. Mark Thibodeau
ReGenerate Livermore Falls, LLC
Livermore Falls, ME 04254

Sent via electronic mail
Delivery confirmation requested

RE: *Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0023710*
Maine Waste Discharge License (WDL) Application #W007705-5S-J-R
Proposed Draft MEPDES Permit Renewal

Dear Mr. Thibodeau,

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

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

The comment period begins today, Wednesday, February 4, 2026, and ends on Friday, March 6, 2026. All comments on the proposed draft permit must be received in the Department of Environmental Protection office on or before the close of business **Friday, March 6, 2026.** Failure to submit comments in a timely fashion may result in the proposed draft/license permit document being issued as drafted.

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

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

If you have any questions regarding the matter, please feel free to call me at 207-458-8706

Sincerely,

Bekah Farmer
Division of Water Quality Management
Bureau of Water Quality

Enclosure

cc: Laura Crossley, DEP
James Knight, DEP
Bradley Kelso, DEP
Wendy Garland, DEP
Lori Mitchell, DEP
Gregg Wood, DEP
Michael Cobb, USEPA
Kathryn Rosenberg, USEPA
Richard Carvalho, USEPA
Sean Mahoney, Conservation Law Foundation
Department of Marine Resources
Inland Fisheries & Wildlife

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

IN THE MATTER OF

REGENERATE LIVERMORE FALLS, LLC	)	MAINE POLLUTANT DISCHARGE
LIVERMORE FALLS	)	ELIMINATION SYSTEM PERMIT
ANDROSCOGGIN COUNTY, MAINE	)	AND
ELECTRICAL GENERATING STATION	)	WASTE DISCHARGE LICENSE
ME0023710	)	
W007705-5S-J-R **APPROVAL**	)	**RENEWAL**

In compliance with the applicable provisions of the *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 REGENERATE LIVERMORE FALLS, LLC (ReGenerate/permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On December 22, 2020, the Department accepted as complete for processing an application from ReGenerate for the renewal of combination Waste Discharge License (WDL) #W007705-5S-I-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0023710, which was issued by the Department on July 6, 2016 for a five-year term. The July 6, 2016 permit authorized the monthly average discharge of 138,000 gallons per day (GPD) and a daily maximum of 175,000 GPD of cooling tower blowdown, boiler blowdown, reverse osmosis system water, stormwater, non-contact cooling water, and cooling tower mist (as runoff) from its biomass electrical generating station to the Androscoggin River, Class C, in Livermore Falls, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the previous permitting action and it is:

1. Removing the requirement in Special Condition A, *Effluent Limitations and Monitoring Requirements*, to monitor temperature during the winter period between October 1 and May 31 due to new information acquired;

2. Revising footnotes in Special Condition A, *Effluent Limitations and Monitoring Requirements,* to be consistent with other MEPDES permits subsequent to ReGenerate's 2016 permit;

3. Establishing Special Condition E, *Combustion Wastes*, in accordance with 40 C.F.R. § 423;

4. Establishing Special Condition F, *Polychlorinated Biphenyl Compounds*, in accordance with 40 C.F.R. § 423; and

PERMIT SUMMARY (cont'd)

5. Removing the requirement in Special Condition N, *Monitoring and Reporting* to submit a physical copy of data submitted electronically for the Discharge Monitoring Reports (DMRs) to be consistent with other MEPDES permits subsequent to ReGenerate's 2016 permit.

CONCLUSIONS

BASED on the findings in the attached PRELIMINARY Fact Sheet dated February 4, 2026, and subject to the Conditions listed below, 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 national resource, that water quality will be maintained and protected;

   (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

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

   (e) Where a discharge will result in lowering the existing 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 discharge will be subject to effluent limitations that require application of best practicable treatment as defined in *Conditions of licenses*, 38 M.R.S. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted application of REGENERATE LIVERMORE FALLS, LLC to discharge a monthly average discharge of 138,000 GPD and a daily maximum of 175,000 GPD of cooling tower blowdown, boiler blowdown, reverse osmosis system water, wood fuel storage leachate, storm water, cooling water, and cooling tower mist from its biomass electrical generating station to the Androscoggin River, Class C, in Livermore Falls, 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 becomes effective upon the date of signature below and expires 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 terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act and Other Administrative Matters*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matter*s, 06-096 C.M.R. Ch. 2 § 20(A) (effective September 15, 2024).

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS ____ DAY OF _____2026.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____

For: MELANIE LOYZIM, Commissioner

Date of initial receipt of application: December 15, 2020
Date of application acceptance: December 22, 2020

This Order prepared by Bekah Farmer, Bureau of Water Quality

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge cooling tower blowdown, wood fuel storage leachate, storm water, boiler blowdown, and reverse osmosis system waters from **Outfall #001E** to the Androscoggin River at Livermore Falls. Such discharges are limited and must be monitored by the permittee as specified below [(1)]:

	Discharge Limitations				Minimum Monitoring Requirements	
Effluent Characteristic	**Monthly Average**	**Daily Maximum**	**Monthly Average**	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Flow *[50050]*	0.138 MGD *[07]*	0.175 MGD *[07]*	---	---	Continuous *[99/99]*	Meter *[MT]*
Temperature [(2)], °F *[00011]* (*June 1 – September 30)*	---	---	---	90°F *[15]*	1/Month *[01/30]*	Grab *[GR]*
Free Available Chlorine [(3)] *[50064]*	---	---	0.2 mg/L *[19]*	0.5 mg/L *[19]*	1/Month *[01/30]*	Grab *[GR]*
Total Suspended Solids [(4)] *[00530]*	34 lbs./day *[26]*	73 lbs./day *[26]*	30 mg/L *[19]*	50 mg/L *[19]*	2/Month *[02/30]*	Grab *[GR]*
Total Zinc *[01092]*	1.2 lbs./day *[26]*	1.4 lbs./day *[26]*	1.0 mg/L *[19]*	1.0 mg/L *[19]*	1/Quarter *[01/90]*	Grab *[GR]*
Oil & Grease *[00556]*	---	---	15 mg/L *[19]*	15 mg/L *[19]*	1/Month *[01/30]*	Grab *[GR]*
Total Chromium *[01034]*	0.23 lbs./day *[26]*	0.29 lbs./day *[26]*	0.20 mg/L *[19]*	0.20 mg/L *[19]*	1/Quarter *[01/90]*	Grab *[GR]*
pH [(5)] *[00400]*	The pH must be ≥ 6.0 and ≤ 9.0 S.U. at any time *[12]*				1/Month *[01/30]*	Grab *[GR]*
Mercury (Total) [(6)] *[71900]*	---	---	25.0 ng/L *[3M]*	37.5 ng/L *[3M]*	1/Year *[01/YR]*	Grab *[GR]*

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

Footnotes: See Pages 5 and 6 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes:

1. **Sampling** – Any change in sampling location must be approved by the Department in writing. ReGenerate must conduct sampling and analysis in accordance with; a) methods approved by 40 Code of Federal Regulations (C.F.R.) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 C.F.R. Part 136, or c) as otherwise specified by the Department.

   Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for wastewater. Samples that are sent to a POTW pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Accreditation Rules*, 10-144 C.M.R. Ch. 263 (amended March 15, 2023). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10 − 144 C.M.R. Ch. 263. If ReGenerate monitors any pollutant more frequently than required by the license using test procedures approved under 40 C.F.R. Part 136 or as specified in this license, the results of this monitoring must be included in the calculation and reporting of the data submitted in the discharge monitoring report (DMR).

   In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the permittee must monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 C.F.R. Part 136 or required under 40 C.F.R. chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (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 C.F.R. Part 136 or required under 40 C.F.R. chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers 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.

   Sampling Locations:

   Influent Sampling of raw water will be taken from the raw water makeup line to the cooling tower. The sample station is the spigot which is located off the raw water fill line just prior to the level control valve.

   Effluent sampling from Outfall #001E must be performed at a sampling station located in the raw water pumphouse building immediately prior to discharge to the river. The sample point is located after the final confluence of wastewater and is representative of the water conditions at the final outfall structure.

2. **Temperature** – The daily maximum temperature limit of 90°F applies year-round. However, the facility is only required to monitor the temperature of the effluent from June 1 through September 30 each year.

SPECIAL CONDITIONS

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

3. **Free available chlorine** – Pursuant to 40 CFR, § 423.12(b)(8), neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available chlorine nor total residual chlorine at any time unless the utility can demonstrate to the Department that the units cannot operate at or below this level of chlorination.

4. **Total Suspended Solids (TSS)** – Effluent TSS results must be calculated using the formula provided in Special Condition G, *Total Suspended Solids,* of this permit. Sampling must be done during 3 sampling events to gather 2 monthly influent/effluent TSS samples. The first sampling event will be for the collection of an influent sample only. After approximately 4 days of plant operations (the time required to turn over the circulation water system's 250,000-gallon capacity one time at a normal blowdown rate of 40 gpm or ~ 4.3 days), the first effluent sample and a second influent sample will be collected. After an additional 4-day period, the second effluent sample will be collected.

5. **pH** – Pursuant to *Effluent Guidelines and Standards*, 06-096 C.M.R. Ch. 525(4)(VIII)(a) (effective January 12, 2001) the permittee may conduct continuous pH monitoring. The permittee must specify on the monthly DMRs the sample type method for pH reporting (i.e. grab sample or continuous monitoring).

   The pH of the effluent shall not be less than or greater than specified standard units unless exceedances are due to natural causes in the ambient receiving waters or precipitation. In such cases, the effluent discharge shall not be more than 0.5 standard units outside the background pH. Background sampling shall be conducted at the facility's intake sampling station on the same day as sampling of the effluent is conducted.

6. **Mercury** – The permittee must conduct all mercury monitoring required by this permit to determine compliance with interim limitations established pursuant to 06-096 C.M.R. Ch. 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 1631E, *Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic 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, 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. Sampling must be conducted in a different quarter every year.

SPECIAL CONDITIONS

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 for 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 usages designated for 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 unsuitable 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 lowers the existing quality of any body of water if the existing quality is higher than the classification.

C. METAL CLEANING WASTES

The chemical metal cleansing wastes generated when cleaning the heat recovery steam generator must not be discharged. This source must be transported off-site for proper disposal/treatment pursuant to all applicable federal, state, and local laws and regulations.

D. COOLING TOWER CLEANING WASTES

The cooling tower solids must be removed for drying either on-site or off-site followed by proper disposal off-site pursuant to all applicable federal, state, and local laws and regulations.

E. COMBUSTION WASTES

Water exposed to combustion wastes must not be discharged. This source must be transported off-site for proper disposal/treatment pursuant to all applicable federal, state, and local laws and regulations.

F. POLYCHLORINATED BIPHENYL COMPOUNDS (PCBS)

There must be no discharge of PCBs. If PCBs are brought on site, the permittee must notify the Department. The Department may reopen this permit pursuant to Special Condition L, *Reopening of Permit For Modification*, of this permit to incorporate applicable monitoring parameters.

G. TOTAL SUSPENDED SOLIDS

Effluent TSS (mg/L) must be calculated using the following equation. Influent TSS ($TSS_{R)}$ and Outfall TSS (TSS_O) samples must be collected and reported as provided under footnote (4) of Special Condition A.

$$TSS_O - TSS_R = TSS_E$$

Where TSS_O = Outflow TSS (mg/L)
TSS_R = Influent TSS (mg/L) x 9
TSS_E = Effluent TSS (mg/L)

SPECIAL CONDITIONS

G. TOTAL SUSPENDED SOLIDS (cont'd)

Effluent Total Suspended Solids (lbs.) must be calculated using the formula:

$$TSS_E \times \text{Flow (MGD)} \times 8.34.$$

The flow used in this calculation must be the total effluent flow on the day the effluent sample was collected.

H. NOTIFICATION REQUIREMENTS

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

1. Any substantial change (increase or decrease) in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants into the system at the time of permit issuance.
2. For the purposes of this section, adequate notice must include information on:
   (a) The quality and quantity of wastewater introduced to the wastewater collection and treatment system; and
   (b) Any anticipated impact of the change in the quantity or quality of the wastewater to be discharged from the treatment system.

I. 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 December 22, 2020; 2) the terms and conditions of this permit; and 3) only from Outfall #001E. Discharges of wastewater from any other point source 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.

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]***:

1. Changes in the number or types of non-domestic wastes contributed directly or indirectly to the wastewater treatment works that may increase the toxicity of the discharge;
2. Changes in the operation of the treatment works that may increase the toxicity of the discharge;
3. Changes in industrial manufacturing processes contributing wastewater to the treatment works that may increase the toxicity of the discharge;
4. In addition, in the comments section of the certification form, the permittee must provide the Department with statements describing:
   i. Changes in stormwater collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge; and
   ii. Increases in the type or volume of transported (hauled) wastes accepted by the facility.

SPECIAL CONDITIONS

J. STATEMENT FOR REDUCED/WAIVED TOXICS TESTING (cont'd)

See **Attachment A** of this permit for an acceptable certification form to satisfy this Special Condition.

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. MONITORING AND REPORTING

Electronic Reporting

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

Electronic 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.

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. Documentation submitted electronically to the Department in support of the electronic DMR may be attached to the electronic DMR and must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

L. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S. § 414-A(5) and upon evaluation of the test results in the Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: (1) include effluent limitations 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.

M. SEVERABILITY

In the event that any provision or part thereof of this permit is declared to be unlawful by a reviewing court, the remainder of the permit 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.

ATTACHMENT A

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CHAPTER 530.2(D)(4) CERTIFICATION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
Commissioner

MEPDES#_____Facility Name_____

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

COMMENTS:

Name (printed): _____

Signature: _____ Date: _____

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

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

Scheduled Toxicity Testing for the next calendar year

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

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

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

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
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 04769-2094
(207) 764-0477 FAX: (207)760-3143

web site: www.maine.gov/dep

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE:	**February 4, 2026**
PERMIT NUMBER:	**ME0023710**
WASTE DISCHARGE LICENSE:	**W007705-5S-J-R**
NAME AND ADDRESS OF APPLICANT:	**REGENERATE LIVERMORE FALLS, LLC** **267 DIAMOND ROAD,** **LIVERMORE FALLS, MAINE 04254**
COUNTY:	**ANDROSCOGGIN**
NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):	**REGENERATE LIVERMORE FALLS** **267 DIAMOND ROAD,** **LIVERMORE FALLS, MAINE 04254**
RECEIVING WATER/CLASSIFICATION:	**ANDROSCOGGIN RIVER / CLASS C**
COGNIZANT OFFICIAL AND TELEPHONE NUMBER:	**MARK THIBODEAU** **FACILITY MANAGER** **(207) 246-1511** **mthibodeau@regenerate-ops.com**

1. APPLICATION SUMMARY

a. Application: On December 22, 2020, the Department accepted as complete for processing an application from ReGenerate for the renewal of combination Waste Discharge License (WDL) #W007705-5S-I-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0023710, which was issued by the Department on July 6, 2016 for a five-year term. The July 6, 2016 permit authorized the monthly average discharge of 138,000 gallons per day (GPD) and a daily maximum of 175,000 GPD of cooling tower blowdown, boiler blowdown, reverse osmosis system water, storm water, cooling water, and cooling tower mist from its biomass electrical generating station to the Androscoggin River, Class C, in Livermore Falls, Maine.

2. PERMIT SUMMARY

a. Terms and conditions: This permitting action is carrying forward all the terms and conditions of the previous permitting action and it is:

1. Removing the requirement in Special Condition A, *Effluent Limitations and Monitoring Requirements,* to monitor temperature during the winter period between October 1 and May 31 due to new information acquired;

2. Revising footnotes in Special Condition A, *Effluent Limitations and Monitoring Requirements* to be consistent with other MEPDES permits subsequent to ReGenerate's 2016 permit;

3. Establishing Special Condition E, *Combustion Wastes,* in accordance with 40 C.F.R. § 423;

2. PERMIT SUMMARY (cont'd)

4. Establishing Special Condition F, *Polychlorinated Biphenyl Compounds,* in accordance with 40 C.F.R. § 423; and

5. Removing the requirement in Special Condition N, *Monitoring and Reporting* to submit a physical copy of data submitted electronically for the Discharge Monitoring Reports (DMRs) to be consistent with other MEPDES permits subsequent to ReGenerate's 2016 permit.

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

March 10, 1992 – The Department issued a new WDL to Northeast Empire Limited Partnership (NELP) for a five-year term. WDL #W007705-42-A-N authorized the discharge of miscellaneous non-process waste waters from a newly constructed biomass fueled electrical generating facility.

June, 1992 – NELP's Beaverwood facility commenced operations and began discharging to the Androscoggin River.

September 24, 1992 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0023710 for a five-year term. The permit authorized the same discharge and contained the same numeric limitations and monitoring requirements contained in the 3/10/92 State WDL.

May 23, 2000 – Pursuant to Maine law, 38 M.R.S. §§ 413 and 420 and Department rule, 06-096 C.M.R. Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W007705-42-A-N by establishing interim monthly average and daily maximum effluent concentration limits of 25.0 parts per trillion (ppt) and 37.5 ppt, respectively, and a minimum monitoring frequency requirement of 2 tests per year for mercury.

July 12, 2000 – The Department administratively modified the 3/10/92 WDL by establishing interim mean and maximum technology-based concentration limitations of 25.0 ng/L and 37.5 ng/L, respectively for mercury.

December 28, 2000 – The Department issued WDL renewal #W007705-5R-B-R for a five-year term.

January 12, 2001 – The Department received authorization from the USEPA to administer the NPDES permit program in Maine. From that date forward, the permit program has been referred to as the MEPDES permit program and ME0023710 (same as the NPDES permit) is the primary reference number for the facility.

May 9, 2002 – The Department transferred all permits and licenses issued by the Department for the Livermore Falls electrical generation facility to Boralex Livermore Falls Inc., issuing the transfer permit Maine WDL #W007705-68-C-T.

December 13, 2006 – The Department issued combination MEPDES permit #ME0023710 / Maine WDL #W007705-5R-D- R for a five-year term.

January 8, 2007 – The Department issued a transfer of MEPDES permit #ME0023710 / Maine WDL #W007705-5R-E-T from Boralex Livermore Falls Inc. to Boralex Livermore Falls LP.

2. PERMIT SUMMARY (cont'd)

September 12, 2011 – The Department issued MEPDES permit #ME0023710 / WDL #W007705-5S-F-R for a five-year term.

July 6, 2016 – The Department issued WDL #W007705-5S-I-R / MEPDES #ME0023710 to ReGenerate Livermore Falls for the monthly average discharge of 138,000 gallons per day (GPD) and a daily maximum of 175,000 GPD of cooling tower blowdown, boiler blowdown, demineralization system ion exchange regeneration water, storm water, cooling water, and cooling tower mist from its biomass electrical generating station to the Androscoggin River, Class C, in Livermore Falls. The name was changed from Boralex to ReEnergy in 2011 with no technical transfer of ownership. This permit superseded the previous WDLs issued, including subsequent minor permit revisions and modifications.

December 15, 2020 – The permittee submitted a timely and complete General Application to the Department for renewal of the July 6, 2016 permit. The application was accepted for processing December 22, 2020 and was assigned WDL #W007705-5S-J-R / MEPDES #ME0023710.

November 15, 2023 – ReGenerate Energy Holdings, LLC., and subsidiaries, changed names. ReEnergy Livermore Falls, LLC was changed to ReGenerate Livermore Falls, LLC. There was no transfer of ownership.

c. Source Description: ReGenerate operates a 39.6 megawatt steam electric power generating station that is fueled by various biomass wood fuels. Biomass fuel consists of conventional wood fuel such as wood from construction and demolition. Biomass fuel is delivered by enclosed trailer truck to the facility. The facility's fuel receiving system consists of two truck dumpers and two receiving hoppers and an enclosed scalper/hog. Fuel is conveyed to the long-term fuel storage area by way of an enclosed conveyor, then transferred via fuel reclaiming equipment, additional covered conveyors and an enclosed boiler feed system to the boiler furnace. In brief, wood is used as fuel to boil water and create steam. Steam is used to turn or power turbines which are connected to generators. These generators convert the power to usable electricity. After moving through the turbine, the steam moves to a cooling tower where it becomes water again. When the cooling tower is cleaned out, there may be minor dust or debris present. If this mass is wet, it is dried on-site in the storage area and then burned.

The facility's ash removal system consists of an ash conditioning system, enclosed conveyors, and an enclosed ash storage area. No water that comes into contact with combustion waste is discharged but is transported to a dump site. Also, various auxiliary systems are installed to support proper operation of the boiler and turbine/generator system.

Stormwater is collected in a lined retention pond where it is available for use via an existing fire suppression system. The biomass storage area has covered and uncovered sections, and runoff goes to the stormwater retention pond. The retention pond discharge comingles with the facility effluent via Outfall #001E.

A map showing the location of the facility and the receiving water is included as Fact Sheet **Attachment A.**

d. Wastewater Treatment: All of the plant floor drains in the turbine/generator building are directed to a 450-gallon oil/water separator. The oil/water separator has a design flow of 30 gpm with a 15 minute retention capacity. The oil/water separator removes sediment and floating pollutants (oil) from incoming water. Regular maintenance is required to

2. PERMIT SUMMARY (cont'd)

remove accumulated debris. The oil/water separators will be maintained according to the Operations & Maintenance Manual provided with the separators, and records of inspections and maintenance activities must be kept at the facility.

Underflow from the oil/water separator flows to the turbine/generator building sump. Wastewater is conveyed into the cooling tower circulation return line. Blowdown from the cooling tower joins several other wastewater flows and is discharged to the Androscoggin River through Outfall #001E via a corrugated metal pipe measuring 18 inches in diameter and extending out into the river approximately 20 feet. Also, oil used or held in equipment supporting the turbine generator rests inside minor containment structures which are designed to retain drips and minor leakage of oil. If a spill of oil were to occur, the oil would be collected in the oil/water separator.

Sulfuric acid is used for cooling tower water pH control. Sodium hypochlorite is used for cooling tower water treatment. A corrosion inhibitor is used in the cooling tower.

See **Attachment B** of this permit for a water balance diagram for this facility.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, *Certain deposits and discharges prohibited,* 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program,* 06-096 C.M.R. Ch. 530 (effective March 21, 2012), require the regulation of toxic substances so as 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 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)(2) classifies the Androscoggin River "*From its confluence with the Ellis River to Worumbo Dam in Lisbon Falls"*, including the point of discharge, as Class C waters. *Standards for classification of fresh surface waters*, 38 M.R.S. § 465(4) describes the standards for Class C waters as follows:

A. *Class C 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 a habitat for fish and other aquatic life.*

B. *Class C waters must be of sufficient quality to support all species of fish indigenous to those waters and to maintain the structure and function of the resident biological community. The dissolved oxygen content of Class C water may not be less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. In order to provide additional protection for the growth of indigenous fish, the following standards apply:*

4. RECEIVING WATER QUALITY STANDARDS (cont'd)

(1) The 30-day average dissolved oxygen criterion of a Class C water is 6.5 parts per million using a temperature of 22 degrees centigrade or the ambient temperature of the water body, whichever is less, if:

(a) A license or water quality certificate other than a general permit was issued prior to March 16, 2004 for the Class C water and was not based on a 6.5 parts per million 30-day average dissolved oxygen criterion; or

(b) A discharge or a hydropower project was in existence on March 16, 2005 and required but did not have a license or water quality certificate other than a general permit for the Class C water.

This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.

(2) In Class C waters not governed by subparagraph (1), dissolved oxygen may not be less than 6.5 parts per million as a 30-day average based upon a temperature of 24 degrees centigrade or the ambient temperature of the water body, whichever is less. This criterion for the water body applies to licenses and water quality certificates issued on or after March 16, 2004.

The department may negotiate and enter into agreements with licensees and water quality certificate holders in order to provide further protection for the growth of indigenous fish. Agreements entered into under this paragraph are enforceable as department orders according to the provisions of sections 347-A to 349.

Between April 15th and October 31st, the number of Escherichia coli bacteria in Class C waters may not exceed a geometric mean of 100 CFU or MPN per 100 milliliters over a 90-day interval or 236 CFU or MPN per 100 milliliters in more than 10% of the samples in any 90-day interval. The board shall adopt rules governing the procedure for designation of spawning areas. Those rules must include provision for periodic review of designated spawning areas and consultation with affected persons prior to designation of a stretch of water as a spawning area.

C. Discharges to Class C waters may cause some changes to aquatic life, except that the receiving waters must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. 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 biological communities affected by an invasive species, the department may find that the discharged effluent will not cause unacceptable changes to aquatic life as long as the materials and methods used will ensure the support of all species of indigenous fish and the structure and function of the resident biological community and will allow restoration of nontarget species.

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

5. REASONABLE POTENTIAL (cont'd)

(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 (Report) prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the main stem of the Androscoggin River from Riley Dam to Nezinscot River (Assessment Unit ID: ME0104000206_423R), which includes the receiving water at the point of discharge, as *Category 4-B: Rivers and Streams Impaired by Pollutants – Pollution Control Requirements Reasonably Expected to Result in Attainment* for dioxin (including 2,3,7,8-TCDD). This segment is also listed in *Category 5-D: Rivers and Streams Impaired by Legacy Pollutants* for polychlorinated biphenyls (PCBs).

The site of the facility has no relevant downstream biomonitoring data. Upstream, at S-222 the macroinvertebrate community was last sampled in 2000 and met class B criteria, above the assigned statutory class of C for this section.

The Report also lists all of Maine's fresh waters as *Category 4-A: Rivers and Streams 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 (TMDL Completed) due to US EPA 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 recommending limits on consumption for all freshwater fish. Maine has instituted statewide programs for removal and reduction of mercury sources."

Maine has already instituted statewide programs for removal and reduction of mercury sources. Pursuant to 38 M.R.S. § 420(1-B)(B)(1), "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 and reporting requirements for this facility pursuant to 06-096 C.M.R. Ch. 519.

The Department has no information that the discharge from the permittee, as conditioned, causes or contributes to non-attainment of applicable Class C water quality standards.

7. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Applicability of National Effluent Guidelines: The USEPA has promulgated national effluent guidelines for the *Steam Electric Generating Point Source Category* at 40 C.F.R. § 423. The ELGs are national standards for wastewater discharges to surface waters from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation, and whose generation of electricity results primarily from a process utilizing fossil-type fuel (coal, oil, or gas), fuel derived from fossil fuel (e.g., petroleum coke, synthesis gas), or nuclear fuel in conjunction with a thermal cycle employing the steam water system as the thermodynamic medium. The facility does not utilize the listed fuel types and is therefore not categorically subject to regulation under this section. However, 38 M.R.S. § 414-A(1)(D) requires that:

> *The discharge will be subject to effluent limitations that require application of the best practicable treatment. "Effluent limitations" means any restriction or prohibition including, but not limited to, effluent limitations, standards of performance for new sources, toxic effluent standards and other discharge criteria regulating rates, quantities and concentrations of physical, chemical, biological and other constituents that are discharged directly or indirectly into waters of the State. "Best practicable treatment" (BPT) means the methods of reduction, treatment, control and handling of pollutants, including process methods, and the application of best conventional pollutant control technology or best available technology economically achievable, for a category or class of discharge sources that the department determines are best calculated to protect and improve the quality of the receiving water and that are consistent with the requirements of the Federal Water Pollution Control Act, as amended, and published in 40 Code of Federal Regulations. If no applicable standards exist for a specific activity or discharge, the department must establish limits on a case-by-case basis using best professional judgment, after consultation with the applicant and other interested parties of record. In determining best practicable treatment for each category or class, the department shall consider the existing state of technology, the effectiveness of the available alternatives for control of the type of discharge and the economic feasibility of such alternatives.*

In the absence of promulgated technology-based standards for facilities that generate electricity using biomass as fuel, the Department has applied, and continues to apply, the standards set forth in 40 C.F.R. § 423.

The wastewater discharges from Outfall #001E are categorized as cooling tower blowdown and low volume wastewater from equipment and building drains. Limits on parameters are specified to ensure attainment of the in-stream water quality criteria and that best practicable treatment (BPT) is utilized. Permits issued by the Department impose the more stringent of the calculated water quality based or BPT based limits. Applicable sections of 40 C.F.R. § 423 include:

40 C.F.R. § 423.12(b)(1): Limits the pH of all discharges.

40 C.F.R. § 423.12(b)(2): Allows no discharge of polychlorinated biphenyl (PCB) compounds.

40 C.F.R. § 423.12(b)(3): Limits TSS and oil and grease (O&G) from low volume waste Sources.

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

40 C.F.R. § 423.12(b)(7): Limits free available chlorine in cooling tower blowdown.

40 C.F.R. § 423.13(d)(1): Limits total chromium and total zinc in cooling tower blowdown.

b. Flow: The previous permitting action contained, and this permitting action is carrying forward, the monthly average and daily maximum dry weather flow limits of 0.138 million gallons a day (MGD) and 0.175 MGD, respectively. This permitting action is also carrying forward the continuous discharge flow monitoring requirement. A review of the monthly Discharge Monitoring Report (DMR) data for the period August 2020 through July 2025 indicates the following:

Flow (N = 60)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly Average	0.138	0.01 – 0.10	0.043
Daily Maximum	0.175	0.03 – 0.18	0.107

The facility had one excursion of Daily Maximum flow during the month of April 2023.

c. Dilution Factors: The department establishes applicable dilution factors for the discharge in accordance with freshwater protocols established in *Surface Water Toxics Control Program*, 06-096 C.M.R. Ch. 530. The department's Division of Environmental Assessment updated the 1Q10, 7Q10, and harmonic mean flow at the ReGenerate Livermore Falls outfall to the Androscoggin River using flow data from the USGS gage in Rumford (NWIS 01054500) for the 1892–2024 record period. Using the results of this update and a monthly average flow limit of 0.138 MGD for the facility's discharge, dilution factors for the facility were calculated as follows:

$$\text{Dilution Factor} = \frac{(\text{River Flow in cfs})(\text{Conversion Factor})}{\text{Plant Flow in MGD}}$$

Modified Acute:
1/4th of 1Q10 = 319 cfs $\Rightarrow$ $\frac{(319\text{ cfs})(0.6464) + 0.138\text{ MGD}}{0.138\text{ MGD}} = 1{,}495{:}1$

Acute:
1Q10 = 1,274 cfs $\Rightarrow$ $\frac{(1{,}274\text{ cfs})(0.6464) + 0.138\text{ MGD}}{0.138\text{ MGD}} = 5{,}968{:}1$

Chronic
7Q10 = 1,514 cfs $\Rightarrow$ $\frac{(1{,}514\text{ cfs})(0.6464) + 0.138\text{ MGD}}{0.138\text{ MGD}} = 7{,}092{:}1$

Human Health
Harm. Mean = 3,328cfs $\Rightarrow$ $\frac{(3{,}328\text{ cfs})(0.6464) + 0.138\text{ MGD}}{0.138\text{ MGD}} = 15{,}590{:}1$

06-096 C.M.R. Ch. 530(4)(B)(1) states that analyses using numeric acute criteria for aquatic life must be based on ¼ of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The regulation states that 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, up to including all of it. ReGenerate Livermore

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

Falls has not provided the department with information as to the actual mixing characteristics of the discharge; therefore, the department is utilizing the default stream flow of ¼ of the 1Q10 in acute evaluations.

d. Total Suspended Solids (TSS): The previous permit contained, and this permitting action is carrying forward, concentration limitations based on the best practicable control technology currently available (BPT) effluent guidelines promulgated at 40 C.F.R. § 423.12(b)(3). The current limits are a monthly average and daily maximum TSS concentration of 30 mg/L and 50 mg/L respectively. In the 2006 permit, multiple outfalls were joined, and the most stringent limitation became the limit for the current single outfall (#001E).

The technology-based mass limits are also being carried forward in this permitting action and were derived as follows:

Monthly Average: (30 mg/L)(8.34)(0.138 MGD) = 34 lbs./day
Daily Maximum: (50 mg/L)(8.34)(0.175 MGD) = 73 lbs./day

This permitting action is carrying forward a minimum monitoring frequency requirement of twice per month for TSS. A review of the DMRs for the period August 2020 through July 2025 indicates the following:

TSS Mass (N = 60)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	34	0 – 17	1
Daily Maximum	73	0 – 34	2

TSS Concentration (N = 60)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	0.0 – 22	3
Daily Maximum	50	0.0 – 45	5

Investigation has shown that the cooling water drawn from the Androscoggin River contains TSS. A portion of this TSS is made up of silica. Both influent and effluent silica levels are monitored daily by the facility operator and comparison of the influent and effluent silica values indicates that the influent is concentrated by a factor of 9 as it passes through the ReGenerate plant. Based on this information, the previous permitting action allowed ReGenerate to remove the amount of TSS contributed by intake and concentration of river water as part of the cooling tower operations (influent TSS X 9 = TSS_R) from the TSS in the plant outflow (TSS_O) to determine the amount of TSS added to the effluent outflow by plant operations (TSS_E). This permitting action is carrying forward the allowance to subtract the amount of TSS contributed by the intake by a factor of 9.

e. Free Available Chlorine (FAC): The previous permitting action contained, and this permitting action is carrying forward, the monthly average and daily maximum technology-based chlorine limitations of 0.2 mg/L and 0.5 mg/L respectively, based on BPT limitation found in 40 C.F.R. § 423.12(b)(7). This permitting action is carrying forward the 1/Month monitoring frequency.

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

A review of the monthly DMR data for the period August 2020 through July 2025 indicates the following:

FAC Concentration (N = 60)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	0.2	0.0 – 0.2	0.1
Daily Maximum	0.5	0.0 – 0.3	0.1

In accordance with 40 C.F.R. § 423.12(b)(8), neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Department that the units cannot operate at or below this level of chlorination.

f. Oil and Grease: The previous permitting action contained, and this permitting action is carrying forward, a water quality based daily maximum concentration limitation of 15 mg/L for oil and grease. The concentration limits were based on a Department best professional judgment of the level at which an oil sheen will be visible and is consistent with other permitting actions. This permitting action is carrying forward the established 1/Month monitoring frequency.

A review of the monthly DMR data for the period August 2020 through July 2025 indicates the following:

Oil & grease Concentration (N = 60)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	15	4 – 13	5
Daily Maximum	15	4 – 13	5

g. Temperature: The previous license contained a daily maximum temperature limit of 90°F as a technology-based limit derived from the licensee's original design calculations. A review of the DMR data for the period October 1995 to the present indicates the temperature of this waste stream has never exceeded 80°F. To comply with Department Regulation Chapter 582, the flow and temperature of the discharge must be regulated such that during the summer period June 1 – September 30, the discharge does not change the receiving water temperature by more than 0.5ºF as a weekly rolling average. The mass balance thermal calculations below indicate that if the Androscoggin River at the point of discharge was at 7Q10 low flow conditions (1,514 cfs or 979 MGD) and at a critical temperature of 66°F and the plant was operating at a daily maximum licensed dry weather flow of 175,000 gpd and the daily maximum licensed temperature of 90° F for an entire week, the ΔT in the receiving water would be approximately 0.004°F:

(Plant flow)(Discharge Temp) + (7Q10 flow)(RW Temp) = (Total flow)(RW Temp)

(0.175 MGD)(90°F) + (979 MGD)(66°F) = (979.175 MGD)(X°F)

X = 66.004°F

Being that the discharge pipe from the ReGenerate facility only extends approximately 20 feet into the Androscoggin River, the Department characterizes this as a bank outfall that does not receive rapid and complete mixing with the receiving waters. Department regulation 06-096 C.M.R. Ch. 530(5), *Surface Water Toxics Control Program*, authorizes

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

the Department to make best professional judgment determinations as to what portion of the receiving water is applicable for discharges that do not receive rapid and complete mixing with the receiving water. Because the true mixing characteristics have not been determined, it is difficult to determine what portion of the 7Q10 river flow is applicable at this facility. Therefore, to determine compliance with 06-096 C.M.R. Ch. 582, *Regulations Relating to Temperature*, the Department has manipulated the calculation above to back calculate the threshold receiving water flow that would comply with Ch. 582. The thermal load needed to change 979 MGD by 0.5°F is 4.082×10^9 BTUs. The calculation is as follows:

$(979{,}000{,}000 \text{ gal})(8.34)(0.5°F) = 4.082 \times 10^9 \text{ BTUs}$

The thermal load from the ReGenerate facility is 3.5×10^7 BTUs. The calculation is as follows:

$(175{,}000 \text{ gal})(8.34)(90°F - 66°F) = 3.500 \times 10^7 \text{ BTUs}$

Therefore, the flow in the receiving water would only need to be 0.86% of the 7Q10 or 8.4 MGD based on the following calculation:

$$\frac{3.5 \times 10^7 \text{ BTUs}}{4.082 \times 10^9 \text{ BTUs}} = 0.0086 \text{ or } 0.86\% \Rightarrow (979 \text{ MGD})(0.0086) = 8.4 \text{ MGD}$$

It is the Department's best professional judgment that the discharge is receiving rapid and complete mixing with at least 0.86% of the 7Q10 receiving water flow and that the discharge complies with Department regulation Chapter 582.

Based on the insignificance of the potential thermal impact on the receiving water during the winter months (October 1 – May 31), and pursuant to 06-096 C.M.R. Ch. 521(4)(g)(7)(i)(B) stating the Department may waive a reporting requirement for the pollutant of temperature due to the presence of adequate information supporting the lack of impact during the winter months, this licensing action is not requiring monitoring and reporting for temperature between October 1 and May 31. The monitoring frequency of 1/Month in the previous licensing action is being carried forward during the period of June 1st to September 30th of each calendar year. The limitations will remain in effect year-round and remain enforceable year-round.

A review of the monthly DMR data for the period August 2020 through July 2025 indicates the following:

Temperature (N = 57)

Value	Limit (°F)	Range (°F)	Mean (°F)
Daily Maximum	90	47 – 77	63

h. pH: The previous permitting action contained, and this permitting action is carrying forward, a BPT-based pH limit of 6.0 – 9.0 standard units and a 1/Month monitoring requirement. This limitation is based on the effluent guideline limitations promulgated at 40 C.F.R. § 423.12(b)(1).

A review of the DMR data for the period August 2020 through July 2025 indicates the following:

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

pH (N = 60)

Value	Limit (SU)	Range (SU)
Daily Maximum	6.0 – 9.0	6.5 – 8.9

i. Total Chromium: The previous permitting action contained monthly average and daily maximum concentration limits of 0.20 mg/L for total chromium based on promulgated effluent guideline limitations for total chromium found at 40 C.F.R. § 423.13(d). The previous permit also contained technology based monthly average and daily maximum limitations of 0.23 lbs./day and 0.29 lbs./day respectively pursuant to *Waste Discharge License Conditions,* 06-096 C.M.R. Ch. 523(6)(f)(2). The mass limitations for total chromium were derived as follows:

Monthly Average Chromium Mass Limit: (0.20 mg/L)(8.34)(0.138 MGD) = 0.23 lbs./day
Daily Maximum Chromium Mass Limit: (0.20 mg/L)(8.34)(0.175 MGD) = 0.29 lbs./day

A review of the DMR data for the period August 2020 through July 2025 indicates the following:

Chromium Mass (N = 20)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	0.23	0.00 – 0.05	0.01
Daily Maximum	0.29	0.00 – 0.05	0.01

Chromium Concentration (N = 20)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	0.20	0.00 – 0.24	0.03
Daily Maximum	0.20	0.00 – 0.24	0.03

One excursion for chromium concentration occurred during the month of October 2022.

This permitting action is carrying forward the minimum monitoring frequency of 1/Quarter based on a Department best professional judgment.

j. Total Zinc: The previous permitting action contained monthly average and daily maximum concentration limits of 1.0 mg/L for total zinc based on promulgated effluent guideline limitations for total zinc found at 40 C.F.R. § 423.13(d)(1). The previous permit also contained technology based monthly average and daily maximum limitations of 1.2 lbs./day and 1.4 lbs./day respectively pursuant to *Waste Discharge License Conditions,* 06-096 C.M.R. Ch. 523(6)(f)(2). The mass limitations for total zinc were derived as follows:

Monthly Average Zinc Mass Limit: (1.0 mg/L)(8.34)(0.138 MGD) = 1.2 lbs./day
Daily Maximum Zinc Mass Limit: (1.0 mg/L)(8.34)(0.175 MGD) = 1.4 lbs./day

A review of the DMR data for the period August 2020 through July 2025 indicates the following:

Zinc Mass (N = 20)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	1.2	0.0 – 0.1	0.04
Daily Maximum	1.4	0.0 – 0.1	0.04

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

Zinc Concentration (N = 20)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	1.0	0.1 – 0.3	0.1
Daily Maximum	1.0	0.1 – 0.3	0.1

This permitting action is carrying forward the minimum monitoring frequency of 1/Quarter based on a Department best professional judgment.

k. Mercury: Pursuant to 38 M.R.S. §§ 413 and 420 and 06-096 C.M.R. Ch. 519, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee in 2000 to establish interim monthly average and daily maximum effluent concentration limits of 25.0 ppt and 37.5 ppt, respectively.

38 M.R.S. § 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 database for the period August 2020 through July 2025 is as follows:

Mercury (N = 6)

Value	Limit (ng/L)	Range (ng/L)	Mean (ng/L)
Monthly Average	25.0	0.5 – 6.6	3.4
Daily Maximum	37.5	0.5 – 6.6	3.4

This permitting action is carrying forward the minimum monitoring frequency of once per year contained in the previous permitting action pursuant to 38 M.R.S. § 420(1-B)(F).

l. Polychlorinated biphenyls (PCBs): Pursuant to 40 C.F.R. § 423.13(a), this permitting action is establishing there shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid. There are transformers on site that would be exposed to stormwater. The operator of the facility has stated there are no PCBs present. There will be no requirement to monitor for PCBs on the condition that no PCBs are on site. During the term of this permit, if PCBs are brought on site, the permittee will need to notify the Department. The Department may reopen this permit pursuant to Special Condition L, *Reopening of Permit For Modification*, of this permit to incorporate applicable monitoring parameters.

m. Whole Effluent Toxicity (WET) and Priority Pollutant Testing: 38 M.R.S. §§ 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. 06-096 C.M.R. Ch. 530 sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met.

06-096 C.M.R. Ch. 530(2)(A) states, *"All licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedances of narrative or numerical water quality criteria."*

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

06-096 C.M.R. Ch. 584, *Surface Water Quality Criteria for Toxic Pollutants*, sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

Dischargers are categorized based on the dilution of the receiving water and the potential risk of toxic contamination. The four categories for dischargers are as follows:

Level I	Chronic dilution factor of <20:1
Level II	Chronic dilution factor of ≥20:1 but <100:1
Level III	Chronic dilution factor ≥100:1 but <500:1 or >500:1 and Q ≥1.0 MGD
Level IV	Chronic dilution >500:1 and Q ≤1.0 MGD

Based on the criteria, the permittee's facility is considered a Level IV discharger as the chronic dilution of the receiving water is 7,092:1 and the permitted flow is less than 1.0 MGD.

Using the categorization criteria as stated above, and pursuant to 06-096 C.M.R. Ch. 530 (2)(D)(1), Level IV dischargers may be waived from routine testing requirements except that the Department is requiring the facility to conduct testing under the following conditions:

(a) The discharger's permit application or information available to the Department indicate that toxic compounds may be present in toxic amounts; or

(b) Previous testing conducted by the discharger or similar dischargers indicates that toxic compounds may be present in toxic amounts.

Special Condition J, *Statement For Reduced/Waived Toxics Testing,* of this permitting action requires the permittee to file an annual certification with the Department. See **Attachment A** of this permit for that file.

However, should there be a substantial change in the characteristics of the discharge in the future, the Department may reopen this permit pursuant to Special Condition L, *Reopening of Permit For Modification*, of this permit to incorporate the applicable WET, priority pollutant, or analytical testing requirements cited above.

8. ANTI-DEGRADATION

As permitted, the Department has determined the existing water usages will be maintained and protected and the discharge will not cause or contribute to the failure of the water body to meet standards for Class C classification.

9. ANTI-BACKSLIDING

Federal regulation 40 C.F.R. § 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 except for provisions specified in the regulation, effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit.

9. ANTI-BACKSLIDING (cont'd)

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 those in the previous permit.

10. PUBLIC COMMENTS

Public notice of this application was made in the *Sun Journal* newspaper on or about November 3, 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).

11. DEPARTMENT CONTACTS

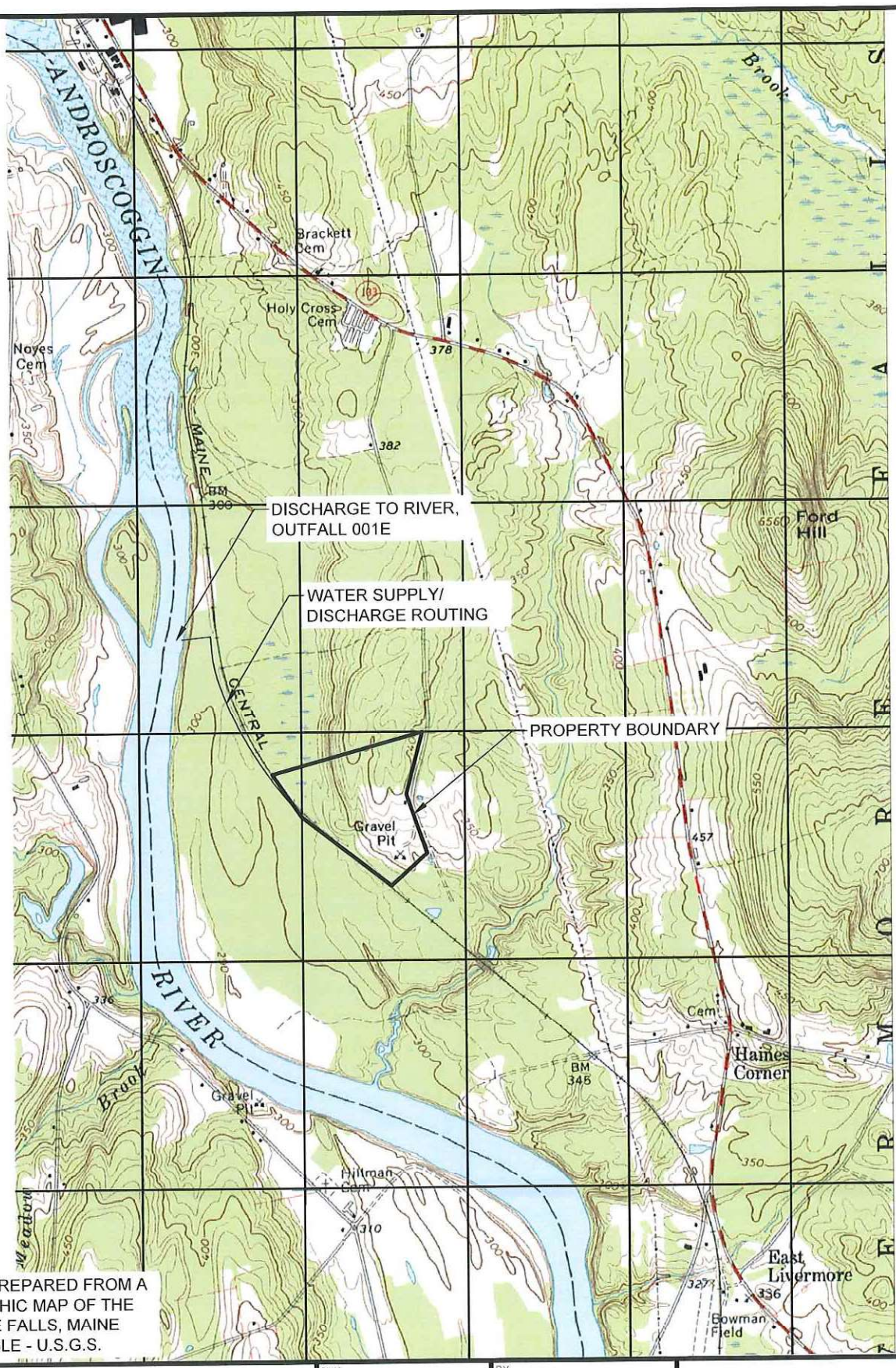
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Bekah Farmer
Division of Water Quality Management - Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 458-8706
e-mail: Bekah.Farmer@maine.gov

12. RESPONSE TO COMMENTS

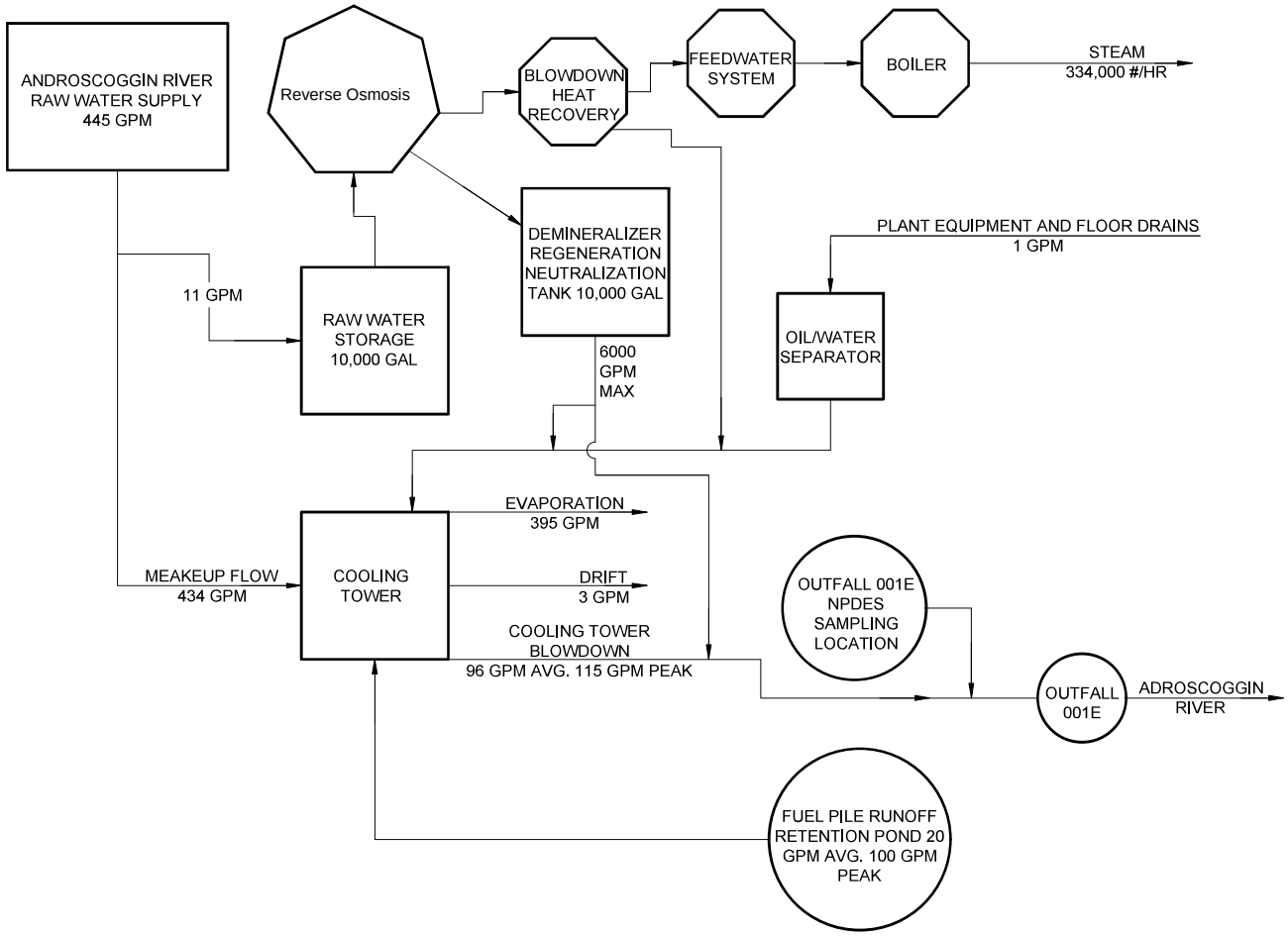
Reserved for future comment.

ATTACHMENT A



REENERGY LIVERMORE FALLS, LLC **267 DIAMOND RD**	DWG: **FIG 1**	BY: JNB	HALEY WARD ENGINEERING | ENVIRONMENTAL | SURVEYING
		DATE: 2020.12.03	
OUTFALL LOCATION MAP	JN: 10098.004.2020	REV:	
	SCALE: 1" = 2000'	REV DATE:	

ATTACHMENT B



PROJECT TITLE: **REENERGY LIVERMORE FALLS, LLC 267 DIAMOND RD**	DWG: **FIG 3**	BY: JNB	
		DATE: 2020.12.03	
SHEET TITLE: **SIMPLIFIED WATER SUPPLY AND DRAIN SCHEMATIC**	JN: 10098.004.2020	REV:	HALEY WARD ENGINEERING | ENVIRONMENTAL | SURVEYING
	SCALE: N.T.S.	REV DATE:	