



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

DEPARTMENT ORDER

IN THE MATTER OF

DOVER-FOXCROFT WATER DISTRICT) MAINE POLLUTANT DISCHARGE
DOVER-FOXCROFT, PISCATAQUIS COUNTY) ELIMINATION SYSTEM PERMIT
DRINKING WATER TREATMENT PLANT) AND
ME0102229) WASTE DISCHARGE LICENSE
W007330-5S-F-R APPROVAL) RENEWAL

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

APPLICATION SUMMARY

On July 24, 2023, the Department accepted as complete for processing an application from DFWD for the renewal of combination Waste Discharge License (WDL) #W007330-5S-E-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0102229, which was issued on August 2, 2018 for a five-year term, and authorized a monthly average discharge of 0.15 million gallons per day (MGD) of filter cleaning (backwash) wastewater from a municipal drinking water treatment plant to the Piscataquis River, Class B, in Dover-Foxcroft, Maine.

PERMIT SUMMARY

This permit carries forward all the terms and conditions established in the previous permit.

CONCLUSIONS

Based on the findings summarized in the attached and incorporated Proposed Draft Fact Sheet dated January 23, 2026, and subject to the special and standard conditions that follow, the Department makes the following CONCLUSIONS:

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

THEREFORE, the Department APPROVES the above noted application of the DOVER-FOXCROFT WATER DISTRICT to discharge a monthly average of 0.15 MGD of filter cleaning (clarifier rinse and backwash wastewater and unspecified quantities of settling tank wastewater, and filter rinse water from a quasi-municipal drinking water treatment plant to the Piscataquis River, Class B, 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 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 authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act*, 5 M.R.S. § 10002 and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR Ch. 2(21)(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: July 24, 2023

Date of application acceptance: July 24, 2023

This Order prepared by Rod Robert, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge **drinking water filter cleaning (clarifier rinse and backwash wastewater), settling tank wastewater⁽²⁾, and filter rinse water from Outfall #001A** to the Piscataquis River. Such discharges must be limited and monitored by the permittee as specified below⁽¹⁾:

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow <i>[50050]</i>	0.15 MGD <i>[03]</i>	Report MGD <i>[03]</i>	---	---	Daily <i>[01/01]</i>	Metered <i>[MT]</i>
TSS <i>[00530]</i>	8.8 lbs./day <i>[26]</i>	17.5 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	60 mg/L <i>[19]</i>	2/Month <i>[02/30]</i>	Grab <i>[GR]</i>
Settleable Solids <i>[00545]</i>	---	---	---	0.3 ml/L <i>[25]</i>	2/Month <i>[02/30]</i>	Grab <i>[GR]</i>
Aluminum (Total) <i>[01150]</i>	---	6.3 lbs./day <i>[26]</i>	---	5.0 mg/L <i>[19]</i>	1/Quarter <i>[01/90]</i>	Grab <i>[GR]</i>
pH <i>[00400]</i>	---	---	---	5.5 – 8.5 SU <i>[12]</i>	1/Week <i>[01/07]</i>	Grab <i>[GR]</i>

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 Page 5 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. 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 testing. Samples that are sent to a laboratory operated by a waste discharge facility licensed pursuant to Waste discharge licenses, 38 M.R.S. § 413 are subject to the provisions and restrictions of Maine Comprehensive and Limited Environmental Laboratory Certification Rules, 10-144 CMR ch. 263 (effective date March 15, 2023). Laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of 10-144 CMR ch. 263. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR).

In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the licensee 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.

SPECIAL CONDITIONS

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

FOOTNOTES:

- 2. Settling Tank Discharges** – The permittee is authorized to discharge settling tank supernatant via Outfall #001A subject to the following conditions:
 - a. The permittee must continuously monitor the discharge to Outfall #001A during any dewatering of the settling tank discharge at the open valve(s) within the settling tank to ensure that no settled materials are discharged.
 - b. The permittee must maintain a written record of visual observations of the discharge at the valve(s) within the settling tank during any dewatering event, which must include the date of the event, the time the valves(s) are opened and closed, and visual observations of the discharge such as but not limited to; color, foam, oil sheen, odor and presence of solids;
 - c. If safely accessible, the permittee must visually inspect the Piscataquis River at Outfall #001A following each settling tank dewatering event and maintain a written record of each inspection; and
 - d. The permittee must monitor sludge levels in the settling tank on a weekly basis and maintain a written record of each inspection.

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. 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 July 24, 2023; 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.

SPECIAL CONDITIONS

D. 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.

E. OPERATIONS AND MAINTENANCE PLAN

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

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

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

SPECIAL CONDITIONS

F. MONITORING AND REPORTING

Electronic Reporting

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

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

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

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. 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.

G. REOPENING OF PERMIT FOR MODIFICATION

In accordance with 38 M.R.S. § 414-A(5) and upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at any time and with notice to the permittee, modify this permit to: 1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded, (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

H. 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: **January 23, 2026**

PERMIT NUMBER: **ME0102229**
WASTE DISCHARGE LICENSE: **W007330-5S-F-R**

NAME AND ADDRESS OF APPLICANT:

**DOVER-FOXCROFT WATER DISTRICT
48 MORTON AVENUE, SUITE B
DOVER-FOXCROFT, MAINE 04426**

COUNTY: **PISCATAQUIS**

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

**DOVER-FOXCROFT WATER DISTRICT
70 FLETCHER ROAD
DOVER-FOXCROFT, MAINE 04426**

RECEIVING WATER CLASSIFICATION: **PISCATAQUIS RIVER / CLASS B**

COGNIZANT OFFICIAL CONTACT INFORMATION:

**MR. Louis Durgin Jr.
(207) 564-2310
LRDURGIN.DFWD@gmail.com**

1. APPLICATION SUMMARY

On July 24, 2023, the Department accepted as complete for processing an application from DFWD for the renewal of combination Waste Discharge License (WDL) #W007330-5S-E-R/Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0102229, which was issued on August 2, 2018 for a five-year term, and authorized a monthly average discharge of 0.15 million gallons per day (MGD) of filter cleaning (backwash) wastewater from a municipal drinking water treatment plant to the Piscataquis River, Class B, in Dover-Foxcroft, Maine.

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2. PERMIT SUMMARY

- a. This permitting action is carrying forward all the terms and conditions of the previous permitting action.
- b. History: This section provides a summary of significant licensing actions and milestones that have been completed for the DFWD.

January 12, 2001 – The Department received authorization from the USEPA to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From that point forward, the program has been referred to as the Maine Pollutant Discharge Elimination System program and MEPDES permit #ME0102229 has been utilized as the primary reference number 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.

April 18, 2003 – The Department issued combination WDL #W007330-5S-B-R / MEPDES permit #ME0102229 to the DFWD for a five-year term. The 4/18/03 WDL/MEPDES permit superseded #W007330-45-A-N issued on July 23, 1997, and a subsequent administrative modification (to revise the pH range limitation to 5.5 – 8.5 SU) on March 2, 2001.

May 21, 2008 – The Department issued WDL # W007330-5S-C-R / MEPDES #ME0102229 for a five-year term. The May 21, 2008, permit superseded previous WDLs issued on April 18, 2003.

April 12, 2013 – The Department issued combination WDL #W007330-5S-D-R / MEPDES permit #ME0102229 to the DFWD for a five-year term.

February 5, 2018 – The DFWD submitted a timely and complete General Application to the Department for renewal of the 4/12/13 MEPDES permit. The application was accepted for processing on February 5, 2018, and was assigned WDL #W007330-5S-E-R / MEPDES permit # ME0102229.

August 2, 2018 – The Department issued combination WDL #W007330-5S-E-R / MEPDES permit #ME0102229 to the DFWD for a five-year term

July 24, 2023 – The DFWD submitted a timely and complete General Application to the Department for renewal of the 8/2/18 MEPDES permit. The application was accepted for processing on July 24, 2023, and was assigned WDL #W007330-5S-F-R / MEPDES permit # ME0102229.

2. PERMIT SUMMARY (cont'd)

c. Source Description: The Dover-Foxcroft Water District (DFWD) operates a drinking water treatment plant on the north shore of the Piscataquis River in Dover-Foxcroft. A map showing the location of the facility and receiving water is included as Attachment A of this fact sheet. The plant was built in 1988 and serves approximately 2,400 customers. The DFWD extracts an average of approximately 0.3 MGD of water (0.8 MGD maximum) from Salmon Stream Pond located in the Town of Guilford. The 12-inch water main intake pipe is located in approximately 8 feet of water during mean low water. Raw water flows to the main treatment plant via gravity flow.

At the treatment plant, water is passed through fine screens to remove any remaining solid material. Caustic soda (sodium hydroxide) is then added to adjust the pH to approximately 5.6–5.8 standard units (SU) to improve coagulant performance. An alum (aluminum sulfate) based coagulant is added to flocculate suspended solids and for color removal, followed by filtration to trap flocculated particles. The four-independent filtration/treatment “trains” each consist of a down-flow clarifier/flocculator and a down-flow multimedia filter.

After filtration, the water is treated with sodium hypochlorite, fluoride, ortho-phosphate, and lime for consumer and distribution system benefit. The finish water is then stored for use in one of two standpipes, an 800,000-gallon capacity standpipe located on Pine Street and a 214,000-gallon capacity standpipe located at the water treatment plant.

The filter units must be periodically cleaned through flushing/backwashing to remove accumulated particulate and maintain treatment efficiency.

d. Wastewater Treatment: The DFWD treatment process is detailed in Attachment B of this fact sheet. Flushing of the down-flow clarifiers is automatically initiated after approximately every 50,000 gallons of water production at the plant, or approximately four (4) clarifier flushes per day. Only one bed at a time is taken off-line for cleaning. Clarifier flushes and multimedia backwash cycles utilize filtered water from the three filter beds not being cleaned. Thus, wastewater generated from flushes and backwashes does not contain chlorine. Each clarifier flush cycle generates approximately 3,360 gallons of wastewater per backwash per clarifier for a total of approximately 53,360 gallons of wastewater per day, which is conveyed to an underground 86,000-gallon settling tank prior to discharge.

Multimedia backwash cycles are initiated based on filter bed turbidity meter readings and each of the four filter beds is backwashed once per day on average. Each backwash cycle generates approximately 3,360 gallons of wastewater per backwash per clarifier for a total of approximately 13,440 gallons of wastewater per day, which is conveyed to an underground 86,000-gallon settling tank prior to discharge.

2. PERMIT SUMMARY (cont'd)

A filter rinse (also commonly referred to as filter-to-waste) cycle is initiated on each of the filter beds after the backwash and prior to placing them back into potable water production. Each filter rinse cycle generates approximately 284 gallons of wastewater per cycle per filter bed, or a total of 1,136 gallons per day based on backwashing the filters once per day (8–10-minute cycle). The filter rinse wastewater is discharged directly to the Piscataquis River via Outfall #001A rather than to the settling tank. The previous permitting action established a quarterly monitoring and reporting requirement for one-year, for total aluminum for this waste stream (an internal waste stream identifier of #100 has been assigned) in order to ensure that this discharge does not exceed the aluminum concentration limitation of 5.0 mg/L established for the main outfall (Outfall #001A).

Wastewater from the 86,000-gallon settling tank is conveyed for discharge to the Piscataquis River via Outfall #001A. Outfall #001A consists of a 10-inch diameter outfall pipe that is submerged in 2 feet of water during mean low water conditions and extends 10 feet from the north shore of the Piscataquis River.

Approximately once per month, the contents of the settling tank must be pumped to one of two 81,000-gallon capacity sludge lagoons for dewatering and drying. Occasionally, the DFWD drains the wastewater from the upper portions of the settling tank through Outfall #001A prior to pumping to the sludge lagoons. During wastewater withdrawals, DFWD staff continuously monitor the dewatering process to ensure that settled materials are not discharged through Outfall #001A.

Separated water from the sludge drying process infiltrates into the ground beneath the sand and fabric-lined lagoons. The two sludge lagoons enable the DFWD to alternate lagoon use annually, allowing for volume reduction of settled materials through freeze/thaw cycles and lagoon maintenance, while providing continual lagoon treatment.

This permitting action is reinforcing the terms and conditions of a February 6, 2003, Administrative Consent Agreement and Enforcement Order in Special Condition A, Footnote #2 of the permit for visual inspection and record keeping of settling tank dewatering activities.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in *Maine's Surface Water Classification System*. In addition, *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program*, 06-096 CMR Ch.530 (effective March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR Ch. 584 (effective 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(7)(E)(1)(b) classifies the Piscataquis River, main stem “*From the Route 15 bridge in Guilford to the Maine Central Railroad bridge in Dover-Foxcroft*”, 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:

3. Class B waters. Class B shall be the 3rd highest classification.

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 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 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.

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. 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 Piscataquis River, main stem, between Route 6 bridge in Guilford and confluence with the Sebec River as Assessment Unit ID ME0102000402_219R), which includes the receiving water at the point of discharge, as, “*Category 2: Rivers and Streams Attaining Some Designated Uses – Insufficient Information for Other Uses.*”

The Report lists all of Maine’s fresh waters 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 4A (TMDL Completed) due to USEPA approval of a Regional Mercury TMDL. Maine has a fish consumption advisory for fish taken from all freshwater due to mercury. Many waters, and many fish from any given water, do not exceed the action level for mercury.

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 freshwater 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.”

6. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- a. Flow: The previous permitting action established, and this permitting action is carrying forward a monthly average flow limitation of 0.15 MGD as it remains representative of the monthly average design capacity of the facility.

The Department reviewed data from Discharge Monitoring Reports (DMRs) that were submitted for the period August 2018 – September 2024. A review of the data indicates the following:

Flow (N=72)

Value	Limit MGD	Range MGD	Mean MGD
Monthly Average	0.15	0.02 – 0.05	0.03
Daily Maximum	Report	0.04 – 0.12	0.06

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

b. Dilution Factors: Dilution factors associated with the permitted discharge flow of 0.15 MGD were derived in accordance with 06-096 CMR 530(4)(A) and were calculated as follows:

$$\text{Mod. Acute: } \frac{1}{4} \text{ of } 1\text{Q10} = 3.25 \text{ cfs} \Rightarrow \frac{(3.25 \text{ cfs})(0.6464) + 0.15 \text{ MGD}}{0.15 \text{ MGD}} = 15.0:1$$

$$\text{Acute: } 1\text{Q10} = 13.0 \text{ cfs} \Rightarrow \frac{(13.0 \text{ cfs})(0.6464) + 0.15 \text{ MGD}}{0.15 \text{ MGD}} = 57.0:1$$

$$\text{Chronic: } 7\text{Q10} = 17.5 \text{ cfs} \Rightarrow \frac{(17.5 \text{ cfs})(0.6464) + 0.15 \text{ MGD}}{0.15 \text{ MGD}} = 76.4:1$$

$$\text{Harmonic Mean} = 154 \text{ cfs} \Rightarrow \frac{(154 \text{ cfs})(0.6464) + 0.15 \text{ MGD}}{0.15 \text{ MGD}} = 655.0:1$$

06-096 C.M.R. ch.530(4)(B)(1) states that analyses using numeric acute criteria for aquatic life must be based on $\frac{1}{4}$ of the 1Q10 stream design flow to prevent substantial acute toxicity within any mixing zone. The regulation goes on to say 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. The Dover-Foxcroft Water District 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 $\frac{1}{4}$ of the 1Q10 in acute evaluations.

The DFWD has not provided information as to the actual mixing characteristics of the effluent with the receiving water. Therefore, the Department is utilizing the default stream flow of $\frac{1}{4}$ of the 1Q10 in acute evaluations.

c. Biochemical Oxygen Demand (BOD₅) & Total Suspended Solids (TSS): The previous permitting action established monthly average and daily maximum concentration limits of 30 mg/L and 60 mg/L, respectively, based on Department best professional judgment (BPJ) of best practicable treatment (BPT) for discharges from drinking water treatment facilities in Maine. The previous permitting action and this permit carries forward, monthly average and daily maximum mass limits of 8.8 lbs./day and 17.5 lbs./day, respectively, for TSS. The mass limits were derived using the concentration limits specified above, the discharge flow limit of 0.035 MGD associated with the 7/23/92 WDL, and a conversion factor of 8.34 lbs./gallon of water as follows:

$$\text{Monthly Average Mass: } (30 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.035 \text{ MGD}) = 8.8 \text{ lbs./day}$$
$$\text{Daily Maximum Mass: } (60 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.035 \text{ MGD}) = 17.5 \text{ lbs./day}$$

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

The Department reviewed 72 DMRs that were submitted for the period August 2018 – September 2024. A review of the data indicates the following:

TSS mass (N=72)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	8.8	0 – 3.6	1.19
Daily Maximum	17.5	0.7 – 5.1	5.1

TSS concentration (DMRs=72)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	2.1 – 11.5	4.02
Daily Maximum	60	2.5 – 16	4.76

d. Settleable Solids: This permitting action carries forward, a 2/Month technology-based daily maximum concentration limit of 0.3 ml/L for settleable solids, which is considered a best practicable treatment limitation (BPT) for secondary treated wastewater.

The Department reviewed 72 DMRs that were submitted for the period August 2018 – September 2024. A review of data indicates the following:

Settleable solids concentration (N=72)

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

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

e. pH—This permit carries forward a pH limit of 5.5 – 8.5 standard units (SU), which is based on 06-096 CMR Ch. 525(3)(III), and a minimum monitoring frequency requirement of once per week.

The Department reviewed 72 DMRs that were submitted for the period August 2018 – September 2024. A review of data indicates the following:

pH (N=72)

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	5.60	7.8

f. Aluminum (Total): The technology-based daily maximum concentration and mass limits are 5.0 mg/L and 6.3 lbs./day, respectively. The minimum monitoring frequency requirement is once per calendar quarter for total aluminum. The basis for establishing aluminum limits is the presence of this metal in the final effluent resulting from the use of an aluminum sulfate coagulant for flocculation of suspended solids in the raw water. The USEPA's General Permit for drinking water treatment facilities in Maine, which was issued to several Maine facilities on or after January 9, 1995, contained a daily maximum concentration limit for aluminum of 5.0 mg/L. This limit was considered a BPT standard for drinking water treatment facility discharges in Maine and has been established in several MEPDES permits, including DFWD's, since the State received authorization to administer the NPDES permit program.

Department licensing/permitting actions impose the more stringent of either a water quality-based or BPT-based limit. 06-096 CMR Ch.530(4)(C), states “*The background concentration of specific chemicals must be included in all calculations using the following procedures. The Department may publish and periodically update a list of default background concentrations for specific pollutants on a regional, watershed or statewide basis. In doing so, the Department shall use data collected from reference sites that are measured at points not significantly affected by point and non-point discharges and best calculated to accurately represent ambient water quality conditions.*” “*The Department shall use the same general methods as those in section 4(D) to determine background concentrations. For pollutants not listed by the Department, an assumed concentration of 10% of the applicable water quality criteria must be used in calculations.*” The Department has no information on the background levels of metals in the water column in the Piscataquis River. Therefore, a default background concentration of 10% of applicable water quality criteria is being used in the calculations of this permitting action. 06-096 CMR Ch.530(4)(E), states “*In allocating assimilative capacity for toxic pollutants, the Department shall hold a portion of the total capacity in an unallocated reserve to allow for new or changed discharges and non-point source contributions. The unallocated reserve must be reviewed and restored as necessary at intervals of not more than five years. The water quality reserve must be not less than 15% of the total assimilative quantity.*” Therefore, the Department is reserving 15% of applicable water quality criteria used in the calculations of this permitting action.

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

Thus, end-of-pipe (EOP) aluminum concentration limits may be calculated using the following formula:

$$\text{EOP Concentration Limit} = (\text{Dilution Factor}) [(0.75) (\text{criterion})]$$

With modified acute (1/4th of the 1Q10) and chronic dilution factors associated with the discharge and ambient water quality criteria for aluminum, water quality-based concentration thresholds for aluminum may be calculated as follows:

$$\text{Acute Daily Maximum Concentration Threshold} = (15.0) [(0.75) (0.75 \text{ mg/L})] = 8.4 \text{ mg/L}$$

$$\text{Chronic Monthly Average Concentration Threshold} = (76.4) [(0.75) (0.087 \text{ mg/L})] = 5.0 \text{ mg/L}$$

The daily maximum BPT-based limit of 5.0 mg/L is as stringent or more stringent than the calculated water quality-based thresholds above and is, therefore, being carried forward in this permitting action

This permit carries forward a 1/Quarter monitoring requirement of 6.3 lbs./day and 5.0 mg/L for Aluminum (Total). A summary of clarifier rinse wastewater effluent total aluminum data reported on the monthly DMRs for the period of August 2018 – September 2024 indicates the effluent total aluminum concentration has ranged from 0.20 mg/L to 3.20 mg/L with an arithmetic mean of 0.811 mg/L.

7. 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. 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.

8. ANTI-DEGRADATION

As permitted, the Department has determined the existing water usage will be maintained and protected and the discharge will not cause or contribute to the failure of the waterbody to meet standards for Class B waters.

9. PUBLIC COMMENTS

Public notice of this application was made in *The Piscataquis Observer* newspaper on or about July 19, 2023. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR Ch.522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

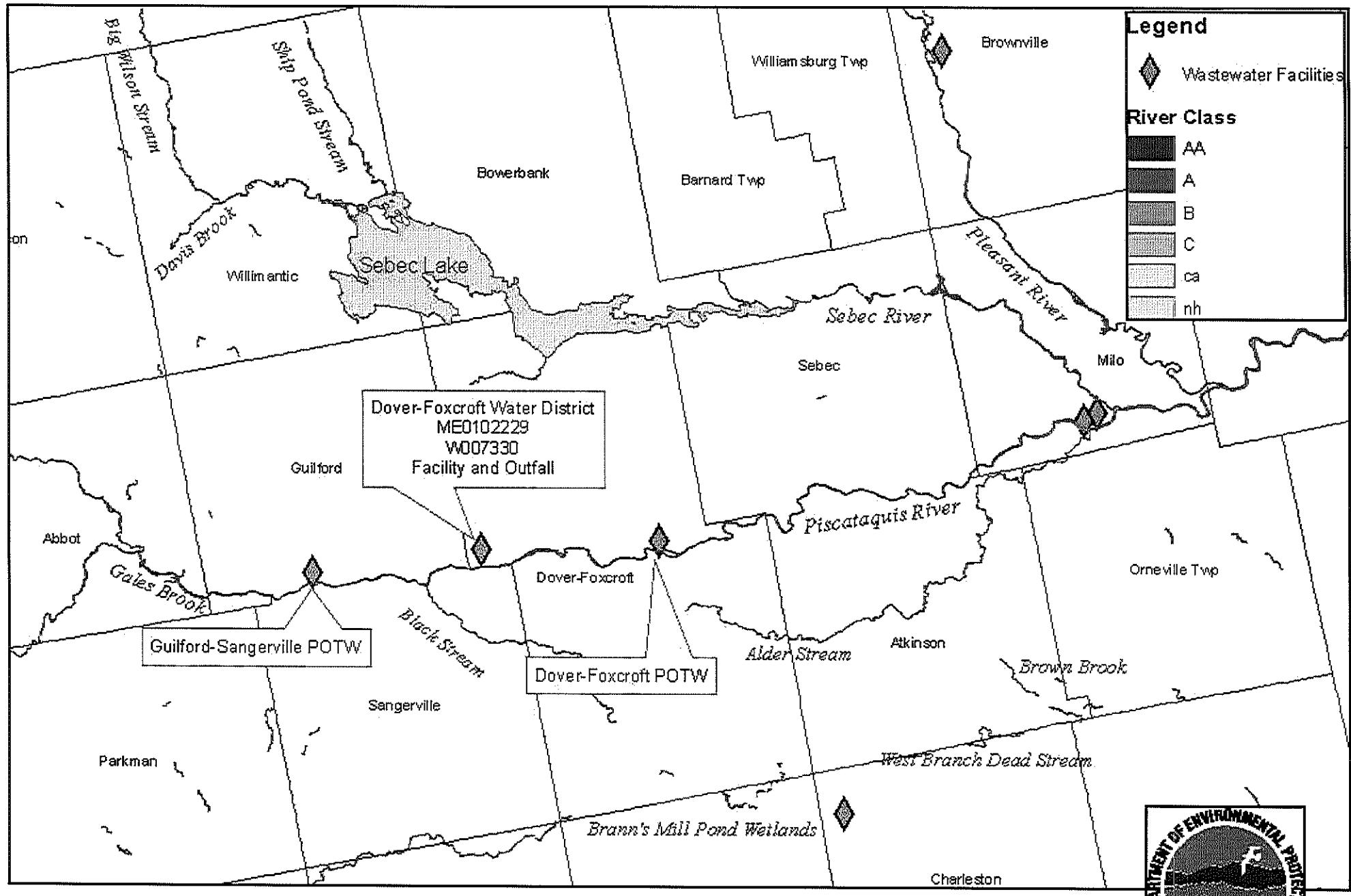
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Rod Robert
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 680-0576
e-mail: rodney.robert@maine.gov

11. RESPONSE TO COMMENTS

Reserved until the end of the formal thirty-day (30) comment period

ATTACHMENT A



Dover-Foxcroft Water District, Piscataquis Country, Maine



Map Created by Maine DEP
December 14, 2012