



DEPARTMENT ORDER

IN THE MATTER OF

GOOD WILL-HINCKLEY)	MAINE POLLUTANT DISCHARGE
OVERBOARD DISCHARGE)	ELIMINATION SYSTEM PERMIT
FAIRFIELD, SOMERSET COUNTY, MAINE)	AND
#ME0022659)	WASTE DISCHARGE LICENSE
#W001284-5C-F-R)	RENEWAL
APPROVAL		

In compliance with provisions of the *Federal Water Pollution Control Act*, Title 33 USC, § 1251, *Conditions of licenses*, 38 M.R.S. § 414-A, and applicable regulations, the Department of Environmental Protection (Department) has considered the application of THE GOOD WILL HOME ASSOCIATION d/b/a GOOD WILL-HINCKLEY (GWH or permittee) with its supportive data, agency review comments, and other related materials on file and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On February 24, 2022, the Department accepted as complete an application for the renewal of combination Maine Waste Discharge License (WDL) #W001284-5C-E-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0022659, which was issued by the Department on August 2, 2017. The 8/2/2017 permit authorized the monthly average discharge of 20,000 gallons per day (GPD) of secondary treated sanitary wastewater from the GWH School facility wastewater treatment system to the Kennebec River, Class C, in Fairfield, Maine.

PERMIT SUMMARY

This permitting action carries forward all the terms and conditions of the previous permit, except that this permit:

1. Expands the testing season for Escherichia Coli bacteria from May 15 – Sept 30 to April 15 – October 31 in each year of the permit
2. Revises the limitation for Escherichia Coli bacteria pursuant to 38 M.R.S. § 465-B

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated January 5, 2024, 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, 38 M.R.S. §464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding natural resource, that water quality will be maintained and protected;
 - (c) Where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and
 - (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment as defined in Maine law, 38 M.R.S. §414-A(1)(D).
5. The overboard discharge system was in continuing existence for the 12 months preceding June 1, 1987.
6. On September 14, 2007, a licensed site evaluator determined subsurface wastewater disposal system could be installed on property owned or controlled by GWH in compliance with the Maine Subsurface Wastewater Disposal Rules. The Department is not requiring the permittee to install a subsurface system at this time.
7. A publicly owned sewer line is not located on or abutting land owned or controlled by the permittee or is not available for the permittee's use.
8. The discharge is not located within the boundaries of a sanitary district or sewer district.

ACTION

THEREFORE, the Department APPROVES the above noted application of the GOOD WILL-HINCKLEY to discharge a monthly average flow of 20,000 gallons per day of secondary treated sanitary wastewater from the GWH wastewater treatment system to the Kennebec River, Class C, in Fairfield, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years from the effective date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [*Maine Administrative Procedure Act, 5 M.R.S. §10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (amended June 9, 2018)*]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS _____ DAY OF _____, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
For Melanie Loyzim, Commissioner

Date of initial receipt of application: February 24, 2022

Date of application acceptance: February 24, 2022

<p>Filed March 9, 2023 State of Maine Board of Environmental Protection</p>

Date filed with Board of Environmental Protection:

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 **secondary treated sanitary wastewater via Outfall #001A** to the Kennebec River. Such discharges shall be limited and monitored by the permittee as specified below⁽¹⁾:

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
	as specified	as specified	as specified	as specified	as specified	as specified	as specified	as specified
Flow <i>[50050]</i>	20,000 GPD <i>[07]</i>	--	Report GPD <i>[07]</i>		--	--	1/Week <i>[01/07]</i>	Measured <i>[MS]</i>
BOD₅ <i>[00310]</i>	5.0 lbs./day <i>[26]</i>	7.5 lbs./day <i>[26]</i>	8.3 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Month <i>[01/30]</i>	Grab <i>[GR]</i>
BOD₅ % Removal⁽²⁾ <i>[81010]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
TSS <i>[00530]</i>	5.0 lbs./day <i>[26]</i>	7.5 lbs./day <i>[26]</i>	8.3 lbs./day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Month <i>[01/30]</i>	Grab <i>[GR]</i>
TSS % Removal⁽²⁾ <i>[81011]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
Settleable Solids <i>[00545]</i>	--	--	--	--	--	0.3 ml/L <i>[25]</i>	1/Month <i>[01/30]</i>	Grab <i>[GR]</i>
<i>E. coli</i> Bacteria⁽³⁾ <i>[31633] (April 15-Oct. 31)</i>	--	--	--	100/100 ml ⁽⁴⁾ <i>[13]</i>	--	236/100 ml <i>[13]</i>	1/Month <i>[01/30]</i>	Grab <i>[GR]</i>
Total Residual Chlorine⁽⁵⁾ <i>[50060]</i>	--	--	--	--	--	1.0 mg/L <i>[19]</i>	3/Week <i>[03/07]</i>	Grab <i>[GR]</i>
pH <i>[00400]</i>	--	--	--	--	--	6.0 – 9.0 SU <i>[12]</i>	1/Month <i>[01/30]</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.

FOOTNOTES: See Page 5 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

FOOTNOTES:

- 1. Monitoring** – All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Sampling and analysis must be conducted 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 shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. Samples that are sent to a publicly owned treatment works (POTW) licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended April 1, 2010). If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR. In accordance with 40 CFR § 122.44(i)(1)(iv), the permittee must monitor according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O, for the analysis of pollutants or pollutant parameters (except WET). A method is "sufficiently sensitive" when: 1) The method minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant or pollutant parameter; or 2) The method has the lowest ML of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR chapter I, subchapter N or O for the measured pollutant or pollutant parameter. The term "minimum level" refers either to the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in the following ways: they may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor.
- 2. Percent Removal** – The permittee must maintain a minimum of 85 percent removal of both BOD₅ and TSS for all flows receiving secondary treatment. The percent removal must be calculated based on influent and effluent concentration values. The permittee's wastewater treatment system does not contain an influent sampling location that is representative of raw wastewater conditions. Therefore, this permitting action authorizes the permittee to assume an influent BOD₅ and TSS concentration value of 286 mg/L for purposes of calculating the monthly percent removal value.
- 3. Bacteria Limits** – *E. coli* bacteria limits and monitoring requirements are seasonal and apply between April 15 and October 31 of each year. The Department reserves the right to require year-round bacteria limits to protect the health, safety and welfare of the public.
- 4. Bacteria Reporting** – The monthly average *E. coli* bacteria limitation is a geometric mean limitation and sample results shall be reported as such.

SPECIAL CONDITIONS

5. **Total residual chlorine (TRC)** – Limitations and monitoring requirements are applicable whenever elemental chlorine or chlorine-based compounds are being used to disinfect the discharge. The permittee shall utilize approved test methods that are capable of bracketing the TRC limitation in this permit.

B. ANNUAL DISCHARGE FEES

Pursuant to *Annual Waste Discharge License Fees*, 38 M.R.S. §353-B, the permittee is required to pay an applicable annual fee for discharges authorized by this permit. Failure to pay an annual fee within 30 days of the billing date of a license/permit is sufficient grounds for accruing interest charges, penalties or revocation of the license.

C. 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 uses designated for the classification of the receiving waters.
3. The permittee must not discharge effluent that causes visible discoloration or turbidity in the receiving waters or otherwise impairs the uses designated for the classification of the receiving waters.
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.

D. TREATMENT PLANT OPERATOR

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

E. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on February 24, 2022. 2) the terms and conditions of this permit; and 3) only from Outfall #001. 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.

SPECIAL CONDITIONS

F. NOTIFICATION REQUIREMENT

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

1. Any substantial change in the characteristics 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.
2. For the purposes of this section, adequate notice shall include information on:
 - a. The quality of wastewater introduced to the wastewater collection and treatment system; and
 - b. Any anticipated impact of the change in the quality of the wastewater to be discharged from the treatment system.

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

By December 31 of each calendar year, the permittee must provide the Department with a certification describing any of the following that have occurred since the effective date of this permit [*ICIS Code 75305*]. See **Attachment B** of the Fact Sheet for an acceptable certification form to satisfy this Special Condition.

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

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

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

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

SPECIAL CONDITIONS

H. SITE EVALUATION FOR TRANSFERRED AND RENEWED PERMITS

Prior to permit transfer or transfer of the property occupying the permitted overboard discharge system, a site evaluation must be performed (if not done so within the most recent five-year period) by a licensed site evaluator with experience in designing systems for the replacement of overboard discharge systems.

Transfers - The Department may not grant approval for permit transfer if the site evaluation concludes that a non-discharging wastewater disposal system designed in compliance with the Maine Subsurface Wastewater Disposal Rules administered by the Maine Department of Health and Human Services, Division of Environmental Health can be installed as an alternative system for the overboard discharge. Pursuant to Maine law 38 M.R.S. §413(3) the alternative system would need to be installed within 90 days of property transfer, except that, if soil conditions are poor due to seasonal weather, the alternative system may be installed as soon as soil conditions permit.

Renewals – Pursuant to *Conditions of Licenses* 38 M.R.S. §414-A(1-B), if a technologically proven alternative is identified, the alternative must be installed within 180 days of the application's being accepted by the department, subject to availability of funding under section 411-A. If the applicant is not eligible for funding under section 411-A, the alternative system must be installed within 180 days. If the applicant is eligible for funding but no funding is available, the installation of an alternative system may be postponed until funding is available.

I. OPERATION & MAINTENANCE (O&M) PLAN

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

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

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

SPECIAL CONDITIONS

J. MONITORING AND REPORTING

Electronic Reporting

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

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

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

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

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

K. REOPENING OF PERMIT FOR MODIFICATIONS

In accordance with 38 M.R.S. § 414-A(5) and upon evaluation of the test results required by 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.

L. SEVERABILITY

If 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.

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE LICENSE**

FACT SHEET

DATE: **January 5, 2024**

MEPDES PERMIT: **#ME0022659**
WASTE DISCHARGE LICENSE: **#W001284-5C-F-R**

NAME AND ADDRESS OF APPLICANT:

**GOOD WILL-HINCKLEY
P.O. BOX 159
HINCKLEY, MAINE 04944**

COUNTY: **SOMERSET**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**GOOD WILL-HINCKLEY
ROUTE 201
HINCKLEY, MAINE 04944**

RECEIVING WATER / CLASSIFICATION: **KENNEBEC RIVER/CLASS C**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. ERIC SUACIER**
(207) 238-4000
esaucier@gwh.org

1. APPLICATION SUMMARY

- a. Application: On February 24, 2022, the Department accepted as complete an application for the renewal of combination Maine Waste Discharge License (WDL) #W001284-5C-E-R / Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0022659, which was issued by the Department on August 2, 2017. The 8/2/2017 permit authorized the monthly average discharge of 20,000 gallons per day (GPD) of secondary treated sanitary wastewater from the GWH School facility wastewater treatment system to the Kennebec River, Class C, in Fairfield, Maine.

2. PERMIT SUMMARY

- a. Terms and conditions: This permitting action carries forward all the terms and conditions of the previous permit, except that this permit:
 1. Expands the testing season for Escherichia Coli bacteria from May 15 – Sept 30 to April 15 – October 31 in each year of the permit
 2. Revises the limitation for Escherichia Coli bacteria pursuant to 38 M.R.S. § 465-B
- b. History: This section provides a summary of significant licensing/permitting actions that have been completed for the GWH facility.

February 14, 1978 – The U.S. Environmental Protection Agency (USEPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0022659 to GWH for a five-year term.

January 12, 2001 – The Department received authorization from the USEPA to administer the 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 MEPDES program, and MEPDES permit #ME0022659 has been utilized as the primary reference number for the GWH wastewater treatment facility.

May 8, 2007 – The Department issued combination WDL/MEPDES permit #W001284-5C-C-R/#ME0022659 to GWH for a five-year term. The May 8, 2007 permit superseded the February 14, 1978 NPDES permit, and WDL #W001284-ZC-B-R issued on September 17, 1996, WDL #W001284-58-A-R issued on June 7, 1990, WDL #1284 issued on July 13, 1983, and WDL #1284 issued on April 6, 1977.

February 23, 2012 – GWH submitted a timely and complete General Application to the Department for renewal of the May 8, 2007, MEPDES permit. The application was accepted for processing on February 29, 2012, and was assigned WDL #W001284-5C-D-R / MEPDES #ME0022659.

April 12, 2012 – The Department issued combination MEPDES Permit #ME0022659 / WDL #W001284-5C-D-R to GWH for a five-year term.

January 23, 2017 - GWH submitted a timely General Application to the Department for renewal of the 5/12/12 MEPDES permit. The application was accepted for processing on January 23, 2017, and was assigned WDL #W001284-5C-E-R / MEPDES #ME0022659.

August 2, 2017 – The Department issued combination MEPDES Permit #ME0022659 / WDL #W001284-5C-E-R to GWH for a five-year term.

February 20, 2022 - GWH submitted a timely General Application to the Department for renewal of the 8.2.2017 MEPDES permit. The application was accepted for processing on February 24, 2023, and was assigned WDL #W001284-5C-F-R / MEPDES #ME0022659.

2. PERMIT SUMMARY (cont'd)

- c. Source Description: The discharge is from an academic year boarding and day school complex for children with approximately 40 students and 42 staff. A total of 13 buildings including Guilford, Keyes, Winthrop, Whitney, Hall, Bancroft, Pike and Golden Rule Cottages; Prescott Auditorium Building, Swasey Building, Carnegie Library, Alford Visitors Center and the Vickers Building are connected to the wastewater collection and treatment system regulated by this permitting action. A map created by the Department showing the location of the facility and receiving water is included as **Attachment A** of this Fact Sheet.
- d. Wastewater Treatment: Wastewater generated at the school receives secondary treatment via a series of two tanks and a sand filter bed treatment system. The wastewater is conveyed via a sewer collection pipe system to two 9,000-gallon septic tanks and then to two, 88' X 100' sand filters. Secondary treated effluent from the two filter beds flows by gravity to a tablet chlorinator for seasonal disinfection. Final effluent is conveyed to the Kennebec River via a 6-inch diameter outfall pipe designated as Outfall #001A in this permitting action. The outfall pipe extends out into the receiving waters approximately 50 feet with approximately two feet of water over the crown of the pipe at summer low flow condition.
- e. Replacement Options: The administrative record includes documentation dated 1/28/09 and 6/21/17 indicating that replacement options are feasible at this location. However, the 1/28/09 report notes that the proposed removal/replacement project could cost as much as \$550,000.00. The 6/21/17 report did not include a removal/replacement cost estimate. While the Department finds the 2009 estimate to be excessively high, it is likely that the current cost of replacement would be financially impracticable. Therefore, the Department is not requiring the removal of the overboard discharge, at this time. Department rule Chapter 596, *Overboard Discharges: Licensing and Abandonment*, Section 5(A)(2) states in part "...the Department may approve an overboard discharge only if all of the following criteria are met." "... a subsurface wastewater disposal system can be installed on land owned or controlled by the applicant and the applicant is eligible for grant funding pursuant to 38 M.R.S.A., §411-A but no funding is available." The Department has determined no funding is available currently for replacement of the school's OBD system.

3. CONDITIONS OF PERMITS

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in *Maine's Surface Water Classification System*. In addition, *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (amended February 16, 2020), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of major river basins, 38 M.R.S. § 467(4)(A)(10) classifies the Kennebec River from the Fairfield-Skowhegan boundary to the Shawmut Dam as Class C waters. *Standards for classification of fresh surface waters*, 38 M.R.S. § 465(4) describes the standards for Class C waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 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 Kennebec River in the following categories.

“Category 4-A: Rivers and Streams Impaired or threatened for one of more designated uses, TMDL Completed.” Impairment in this context refers to *E. coli* bacteria and combined sewer overflow (CSO) affected reaches of the river. On September 28, 2009, the USEPA approved the Department’s Maine Statewide Bacteria TMDL (Total Maximum Daily Loads), dated August 2009, for fresh, marine and estuarine waters impaired by bacteria. This permitting action establishes bacterial limits and a requirement to disinfect the effluent on a seasonal basis to ensure the discharge does not cause or contribute to non-attainment of in-stream bacteria standards.

“Category 4-B: Rivers and Streams Impaired by Pollutants - Pollution Control Requirements Reasonably Expected to Result in Attainment.” Impairment in this context refers to a fish consumption advisory due to the presence of dioxin (including 2,3,7,8-TCDD). The 2012 Report states that new dioxin sources have been removed and the river is expected to attain its ascribed standards. Compliance is measured by (1) no detection of dioxin in any internal waste stream (at 10 pg/l detection limit); and (2) no detection in fish tissue sampled below a mill's outfall greater than upstream reference.

“Category 4-A: Rivers and Streams with Impaired Use, TMDL Completed.” All freshwaters formerly listed in Category 5-C are moved to Category 4-A (TMDL Completed) due to US EPA approval of a Regional Mercury TMDL. Impairment in this context refers to a statewide fish consumption advisory due to elevated levels of mercury in some fish tissues. The Report states, *“Impairment caused by atmospheric deposition of mercury; a regional scale TMDL has been approved. 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 Human Services decided to establish a statewide advisory for all freshwater fish that recommends limits on consumption. Maine has already instituted statewide programs for removal and reduction of mercury sources.”*

“Category 5-D: Rivers and Streams Impaired by Legacy Pollutants.” Impairment in this context refers to the presence of polychlorinated biphenyls (PCBs) in some fish tissues. The presence of PCBs is not typically associated with any identifiable source but is rather a legacy of practices that predate the national ban on the use of PCB in 1979. The Department has no information that the discharge from the GWH as permitted causes or contributes to this non-attainment status.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow: The previous permitting action established, and this permitting action is carrying forward, a monthly average discharge flow limit of 20,000 gallons per day (GPD) based on the design flow for the treatment system, and a daily maximum discharge flow reporting requirement.

The following table summarizes effluent data reported on Discharge Monitoring Reports (DMRs) for the period of September 2017 – October 2023.

Flow (DMRs=72)

Value	Limit (GPD)	Range (GPD)	Mean (GPD)
Monthly Average	20,000	0 – 17, 441	5311
Daily Maximum	Report	1,790 – 57,203	11,793

- b. Dilution Factors: Dilution factors associated with the average design flow of 20,000 GPD (0.020 million gallons per day, MGD) were derived in accordance with 06-096 CMR 530(4)(A)(1)(a) and were calculated as follows:

$$\text{Modified Acute: } 1\text{Q}10 = 487 \text{ cfs}^{(1)} \Rightarrow \frac{(487 \text{ cfs})(0.6464) + (0.020 \text{ MGD})}{(0.020 \text{ MGD})} = 15,741:1$$

$$\text{Acute: } 1\text{Q}10 = 1,947 \text{ cfs} \Rightarrow \frac{(1,947 \text{ cfs})(0.6464) + (0.020 \text{ MGD})}{(0.020 \text{ MGD})} = 62,928:1$$

$$\text{Chronic: } 7\text{Q}10 = 2,388 \text{ cfs} \Rightarrow \frac{(2,388 \text{ cfs})(0.6464) + (0.020 \text{ MGD})}{(0.020 \text{ MGD})} = 77,181:1$$

$$\text{Harmonic Mean: } = 4,034 \text{ cfs}^{(2)} \Rightarrow \frac{(4,034 \text{ cfs})(0.6464) + (0.020 \text{ MGD})}{(0.020 \text{ MGD})} = 130,380:1$$

Footnotes:

- (1) 06-096 CMR 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 1Q10 is the lowest one-day flow over a ten-year recurrence interval. 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. Based on information provided by the permittee as to the configuration and location of the outfall pipe the Department has made the determination that the discharge does not receive rapid and complete mixing with the receiving water; therefore, the default stream flow of ¼ of the 1Q10 is applicable in acute statistical evaluations pursuant to 06-096 530.

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

(2) The harmonic mean flow of the Kennebec River established in this permitting action is based on a 1/9/91 statistical evaluation developed by Walter M. Grayman, a consulting engineer for the USEPA 1990 Risk Assessment for Dioxin.

c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): The previous permitting action established, and this permitting action is carrying forward, monthly average and weekly average technology-based concentration limits of 30 mg/L and 45 mg/L, respectively, for BOD₅ and TSS based on the secondary treatment requirements specified at *Effluent Guidelines and Standards*, 06-096 CMR 525(3)(III) (effective January 12, 2001), and a monthly average concentration limit of 50 mg/L, which is based on a Department best professional judgment of best practicable treatment for secondary treated wastewater. The technology-based monthly average, weekly average and monthly average mass limits of 5.0 lbs./day, 7.5 lbs./day and 8.3 lbs./day, respectively, established in the previous permitting action for BOD₅ and TSS are based on the discharge flow limit of 20,000 GPD and the applicable concentration limits are also being carried forward in this permitting action.

A summary of the effluent BOD₅ and TSS data as reported on the DMRs submitted to the Department for the period September 2017 – October 2023 follows. It is noted that the monthly average, weekly average and monthly average effluent values are equivalent due to the frequency (once per month) of monitoring conducted by the permittee.

BOD₅ (DMRs=72)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	5.0	0 – 1.73	0.135
Weekly Average	7.5	0 – 6.30	0.21
Daily Maximum	8.3	0.02 – 1.73	0.21

TSS (DMRs=72)

Value	Limit (lbs./day)	Range (lbs./day)	Average (lbs./day)
Monthly Average	5.0	0 – 1.71	0.142
Weekly Average	7.5	0 – 1.71	0.14
Daily Maximum	8.3	0.04 – 2.0	0.267

This permitting action carries forward the once per month minimum monitoring frequency requirement.

This permitting action also carries forward a requirement for a minimum of 85% removal of BOD₅ and TSS pursuant to 06-096 CMR 525(3)(III)(a)(3) and (b)(3). The GWH wastewater treatment system does not contain an influent sampling location that is representative of raw wastewater conditions.

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

According to the USEPA’s Onsite Wastewater Treatment Systems Manual, dated February 2002, table 3-7 entitled “Constituent Mass Loadings and Concentrations in Typical Residential Wastewater” high end range of values, influent values for BOD₅ and TSS may be assumed to be 286 mg/L. Therefore, this permitting action authorizes GWH to assume an influent BOD₅ and TSS concentration value of 286 mg/L for purposes of calculating the monthly percent removal value until such time that the infrastructure is modified or replaced such that collection of a representative raw influent sample is practical.

BOD % Removal (DMRs=72)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	96 – 99	98.9

TSS % Removal (DMRs=72)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	92 - 99	98.72

- d. Settleable Solids: The previous permitting action established, and this permitting action carries forward, a monthly average concentration limit of 0.3 ml/L, which is considered by the Department as best professional judgment of best practicable treatment.
- e. Escherichia coliform (*E. coli*) bacteria: The monthly average and daily maximum *E. coli* bacteria limits of 142 colonies/100 ml and 949 colonies/100 ml in the previous permitting action are revised in this permitting action based on the State of Maine Water Classification Program criteria for Class C waters. In 2008 the State Legislature adopted more stringent AWQC for *E. coli* bacteria. The newer criteria for Class C water are 100 colonies/100 ml as a monthly average and 236 colonies/100 ml as a daily maximum. The limitations are seasonal and apply from April 15th – October 31st of each year. The Department reserves the right to require year-round disinfection to protect the health and welfare of the public.

A summary of the monthly DMR data for the period September 2017 – October 2023 (applicable months only) for *E. coli* bacteria follows.

***E. coli* bacteria (DMRs=29)**

Value	Limit (col/100 mL)	Range (col/100 mL)	Mean (col/100 mL)
Monthly Average	142	<1 – 2420	<296.68
Daily Maximum	949	<1 – 2420	<384.41

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

- f. Total Residual Chlorine (TRC): The previous permitting action established a technology-based monthly average concentration limit of 1.0 mg/L for TRC. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors as determined above, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	Mod.A & C Dilution Factors	Calculated	
			Acute Threshold	Chronic Threshold
0.019 mg/L	0.011 mg/L	15,741:1 (Mod.A) 77,181:1 (C)	299 mg/L	849 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. The technology-based daily maximum concentration limit of 1.0 mg/L is more stringent than either the calculated acute or chronic water quality-based thresholds and is therefore being carried forward in this permitting action.

A summary of the monthly DMR TRC data for the period September 2017 – October 2023 (applicable disinfection period only) follows.

Total residual chlorine (DMRs=49)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.20 – 2.5	0.837

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

In consideration of compliance history with TRC, this permitting action carries forward the minimum monitoring frequency requirement of three times per week.

It is noted that *E. coli* bacteria limits are seasonal; however, TRC monitoring is required any time chlorine-based compounds are in use for effluent disinfection. For instances when the chlorine-based compounds have not been utilized for effluent disinfection for an entire reporting period, the permittee shall report "NODI-9" for this parameter on the monthly discharge monitoring report (DMR).

- g. pH: The previous permitting action established, and this permitting action is carrying forward, a pH range limit of 6.0 – 9.0 standard units (SU), based on the secondary treatment requirements prescribed at 06-096 CMR 525(3)(III)(c).
- h. Whole Effluent Toxicity (WET) & Chemical-Specific Testing – *Conditions of licenses*, 38 M.R.S. § 414-A and *Certain deposits and discharges prohibited*, 38 M.R.S.A. § 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. *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective October 9, 2005), and *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective October 9, 2005) set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

06-096 CMR 530(2)(A) specifies the dischargers subject to the rule as:

All licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewaters are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.

The rule further states:

The following dischargers are exempt from testing requirements of this rule unless the Department determines that there is a need for testing based on the nature, location or circumstances of an individual discharge.

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

- (1) Discharges from individual discharge points licensed to discharge less than 50,000 gallons per day of solely domestic wastewater and with a chronic dilution factor of at least 50 to 1, provided no holding tank wastes containing chemicals are accepted by the facility;
- (2) Discharges from residential overboard discharge systems; or
- (3) Discharges from combined sewer overflow discharge points, provided the owner of the sewerage system is conducting or participating in a discharge abatement program. See Chapter 570, Combined Sewer Overflow Abatement.

GWH is permitted to discharge 20,000 GPD of solely domestic wastewater and has a chronic dilution factor of 77,181:1. Therefore, the facility qualifies for an exemption from toxics testing and this permitting action is not establishing toxics testing requirements.

06-096 CMR 530(2)(D)(4) states:

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

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

Special Condition G of the permit establishes, *06-096 CMR 530(2)(D)(4) Statement for Reduced /Waived Toxics Testing*, pursuant to 06-096 CMR 530(2)(D)(4). The annual certification statement requirement is being carried forward in this permitting action. See **Attachment B** of this Fact Sheet for an acceptable certification form to satisfy this Special Condition. This permit provides for reconsideration of testing requirements, including the imposition of certain testing, in consideration of the nature of the wastewater discharged, existing wastewater treatment, receiving water characteristics, and results of testing.

7. ANTI-DEGRADATION/DISCHARGE IMPACT ON RECEIVING WATER QUALITY

Federal regulation 40 CFR, §122(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. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

9. PUBLIC COMMENTS

Public notice of this application was made in the *Morning Sentinel* newspaper on or about December 29, 2021. 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 shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

10. DEPARTMENT CONTACTS

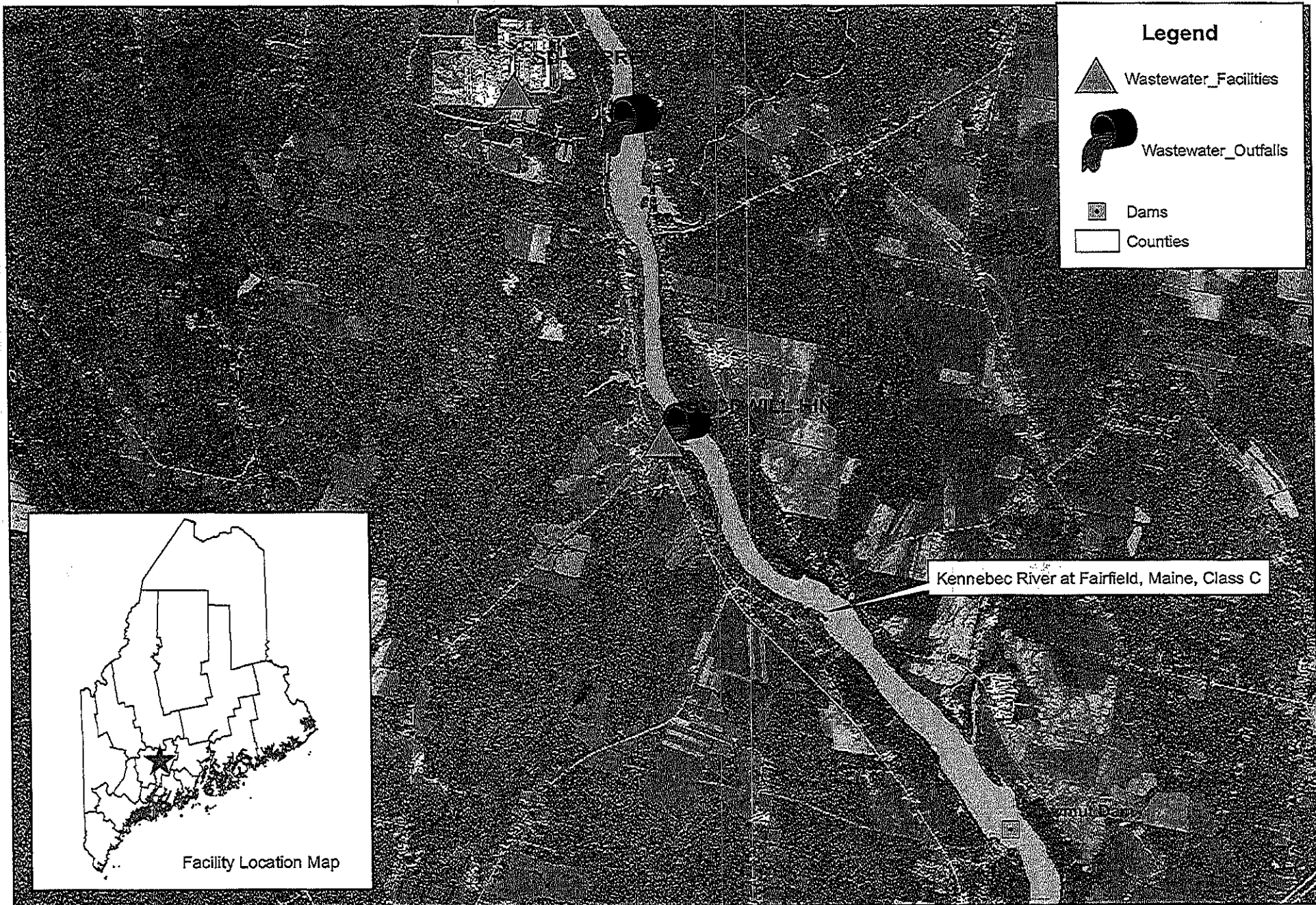
Additional information concerning this permitting action may be obtained from, and written comments sent to:

Rod Robert
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
e-mail: rodney.robert@maine.gov





11. RESPONSE TO COMMENTS

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

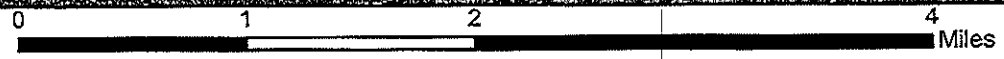
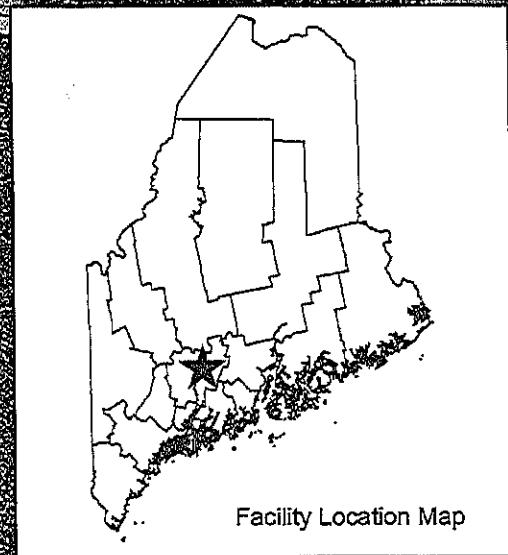
ATTACHMENT A



Legend

-  Wastewater_Facilities
-  Wastewater_Outfalls
-  Dams
-  Counties

Kennebec River at Fairfield, Maine, Class C



Good Will-Hinckley - Permit #ME0022659
Fairfield, Somerset County, Maine



Map created by Maine DEP
 March 2012



ATTACHMENT B

CHAPTER 530.2(D)(4) CERTIFICATION

MEPDES# _____ Facility Name _____

Since the effective date of your permit have there been:	NO	YES (Describe in Comments)
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?		

COMMENTS:

Name(print) _____

Signature _____ Date _____

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

This form may be used to meet the requirements of Chap 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.