



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



JANET T. MILLS
GOVERNOR

GERALD D. REID
COMMISSIONER

July 2, 2019

Mr. Robert Bechtold
Acadia National Park
P.O. Box 177
Bar Harbor, Maine 04609

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit ME0090051
Maine Waste Discharge License (WDL) Application #W003610-5E-E-R
Proposed Draft Permit

Dear Mr. Bechtold:

Enclosed is a proposed draft MEPDES permit and Maine WDL (permit hereinafter) 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 conditions (special conditions specific to this permit are enclosed; standard conditions applicable to all permits are available upon request). 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, as required by our new regulations, and from any other parties who have notified the Department of their interest in this matter. All comments must be received in the Department of Environmental Protection office on or before the close of business **Thursday, August 1, 2019**. Failure to submit comments in a timely fashion will result in the final 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

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826

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 04679
(207) 764-0477 FAX: (207) 760-3143

If you have any questions regarding the matter, please feel free to call me at 485-2404.

Sincerely,



Irene Saumur
Division of Water Quality Management
Bureau of Water Quality

Enc.

Ec: William Johnson, DEP/CMRO
Lori Mitchell, DEP/CMRO
Marilyn Vega, USEPA
Shelly Puleo, USEPA
IFWEnvironmentalreview@maine.gov
EnvironmentalReview.DMR@maine.gov



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

DEPARTMENT ORDER

IN THE MATTER OF

NATIONAL PARK SERVICE) MAINE POLLUTANT DISCHARGE.
ACADIA NATIONAL PARK,) ELIMINATION SYSTEM PERMIT
SCHOODIC FACILITY)
WINTER HARBOR, HANCOCK COUNTY MAINE) AND
ME0090051) WASTE DISCHARGE LICENSE
W003610-5E-E-R) **APPROVAL**) **RENEWAL**

In compliance with the applicable provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, Conditions of Licenses, Maine Law 38 M.R.S. Section 414-A, *et seq.*, and applicable rules of the Department of Environmental Protection (Department), the Department has considered the application of the NATIONAL PARK SERVICE (permittee), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On June 24, 2019, the Department accepted as complete for processing an application from the permittee for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0090051/Maine Waste Discharge License (WDL) #W003610-5E-D-R issued by the Department on August 20, 2014, for a five-year term. The 8/20/14 Permit authorized the year round, monthly average discharge of 45,000 gallons per day (gpd) of secondary treated wastewater from (Outfall #001A) to Arey Cove, Class SB, Winter Harbor, Maine.

PERMIT SUMMARY

This permit is carrying forward all the terms and conditions of the previous permitting action and;

1. Establishing seasonal (April 15 – October 31st) monthly average and daily maximum water quality-based limitations and monitoring requirements for enterococcus bacteria along with a compliance schedule to come into compliance with said limitations.
2. Establishing more stringent limitations for fecal coliform bacteria based on the most current revisions to the National Shellfish Sanitation Program.
3. For calendar year 2019, increasing the timeframe when fecal coliform bacteria limits are in effect from May 15 – September 30 to April 15 – October 31 based on a revision to Maine law, 38 M.R.S. §465(3)(B) effective August 2, 2018. Beginning April 15, 2020, fecal coliform limitations and monitoring requirements will in effect on a year-round basis.

CONCLUSIONS

BASED on the findings in the attached **Proposed Draft** Fact Sheet dated July 2, 2019, 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 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 discharges 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. A non-discharging sub-surface waste water disposal system cannot be installed in compliance with the Maine Subsurface Waste Water Disposal Rules at the time the renewal application was accepted for processing by the Department.
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.

ACTION

THEREFORE, the Department APPROVES the application of the NATIONAL PARK SERVICE to discharge a year-round, monthly average flow of 45,000 gpd of secondary treated sanitary waste water (Outfall #001A) to Arey Cove, Class SB, Winter Harbor, Maine, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

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 after that 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, 5 M.R.S. §10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (amended June 9, 2018)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

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

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
Gerald D. Reid, Commissioner

Date of initial receipt of application: June 24, 2019

Date of application acceptance: June 24, 2019

Date filed with Board of Environmental Protection: _____

This Order prepared by Irene Saumur, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- Beginning the effective date of this permit, the permittee is authorized the year round, monthly average discharge of 45,000 gpd of secondary treated sanitary waste water from **Outfall #001A** to Arey Cove, Class SB, Winter Harbor, Maine. 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>
Flow [50050]	45,000 gpd [07]	---	Report (gpd) [07]	---	---	---	Continuous [99/99]	Recorder [RC]
BOD₅ ⁽²⁾ [00310]	11 lbs/day [26]	17 lbs/day [26]	19 lbs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month [02/30]	Composite [08]
BOD₅ Percent Removal ⁽³⁾ [81010]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
TSS [00530]	11lbs/day [26]	17 lbs/day [26]	19 lbs/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Month [02/30]	Composite [08]
TSS Percent Removal ⁽³⁾ [81011]	---	---	---	85% [23]	---	---	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	2/Month [02/30]	Grab [GR]
Total Residual Chlorine ⁽⁵⁾ [50060]	---	---	---	---	---	1.0 mg/L [19]	1/Week [01/07]	Grab [GR]
pH [00400]	---	---	---	---	---	6.0 – 9.0 SU [12]	1/Year [01/YR]	Grab [GR]

Footnotes See Page 6 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

1. Beginning the effective date of this permit, the permittee is authorized the year round, monthly average discharge of 45,000 gpd of secondary treated sanitary waste water from **Outfall #001A** to Arey Cove, Class SB, Winter Harbor, Maine. Such discharges shall be limited and monitored by the permittee as specified below ⁽¹⁾:

Fecal Coliform Bacteria [31633] (April 15 – October 31, 2019)	---	---	---	14 CFU/100mL ⁽⁴⁾ [13]	---	31 CFU/100 mL [13]	1/Week [01/07]	Grab [GR]
Fecal Coliform Bacteria [31616] (Year round beginning April 15, 2020)	---	---	---	14 CFU/100 mL ⁽⁴⁾ [13]	---	31 CFU/100 mL [13]	1/Week [01/07]	Grab [GR]
Enterococci Bacteria [31639] (April 15 – Oct 31, beginning 2021)				8 CFU/100 mL ⁽⁴⁾ [13]	---	54 CFU /100 mL [13]	1/Week [01/07]	Grab [GR]

SPECIAL CONDITIONS

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

Footnotes

1. **Sampling** – All effluent monitoring must 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 must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services for waste water testing. Samples that are sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S. § 413 or laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended Dec 19, 2018). 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.
2. **2/Month** – There shall be at least 10 days between sampling events when monitoring is 2/Month
3. **Percent Removal** – The treatment facility shall 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 for BOD and TSS.
4. **Bacteria Reporting** – The monthly average fecal coliform and enterococcus bacteria limitations are geometric mean limitations and sample results must be reported as such. Sampling for enterococcus, fecal coliform bacteria and total residual chlorine must be conducted on the same days of the month.
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 must utilize approved test methods that are capable of bracketing the TRC limitation in this permit.

B. ANNUAL DISCHARGE FEES

Pursuant to Maine law, 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 effluent must not contain 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 effluent must not contain 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 discharges must not cause visible discoloration or turbidity in the receiving waters which would impair the uses designated for the classification of the receiving waters.
4. Notwithstanding specific conditions of this permit, the effluent must not lower 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.

D. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Grade II** certificate (or higher) or must be a Maine Registered Professional Engineer pursuant to *Sewerage Treatment Operators*, Title 32 M.R.S., Sections 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 June 24, 2019; 2) the terms and conditions of this permit; and 3) only from Outfall #001A. Discharges of waste water from any other point source are not authorized under this permit, and shall 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 or proposed change 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, notice regarding substantial change must include information on:
 - (a) the quality and quantity of wastewater introduced to the wastewater collection and treatment system; and
 - (b) any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.

G. REQUIREMENTS TO ELIMINATE OVERBOARD DISCHARGES

The owners of the overboard discharges subject to this permit are required to install a technologically proven alternative and properly abandon the overboard discharges when any of the following actions are initiated.

1. ***Transfer of Ownership of Property or Significant Action.*** Prior to transfer of ownership of property containing an overboard discharge (*i.e.*, change in the legal entity that owns a property, facility or structure that is the subject of a permit), the parties to the transfer shall determine the feasibility of technologically proven alternatives¹ to the overboard discharge. Prior to completing a significant action (*i.e.*, single construction project performed on a primary residence with an overboard discharge when the total material and labor cost of the construction project exceeds \$50,000), the owner shall determine the feasibility of technologically proven alternatives to the overboard discharge.
 - a) If an alternative to the overboard discharge is available, the alternative system must be installed within 90 days of property transfer or significant action, unless otherwise provided by *Waste discharge licenses*, 38 M.R.S. § 413(3-A).
 - b) If an alternative to the overboard discharge is not available, the new owner shall, no later than two weeks after any transfer of ownership, submit an application to the Department for transfer of this permit.

¹ Feasibility of technologically proven alternatives are based on determinations by a licensed site evaluator's application of plumbing standards adopted by the Department of Health and Human Services pursuant to Title 22, section 42.

SPECIAL CONDITIONS

G. REQUIREMENTS TO ELIMINATE OVERBOARD DISCHARGES (cont'd)

2. **Permit Renewal.** Waste Discharge Permits for overboard discharges are issued for a five-year term. The permittee shall submit a complete application for permit renewal prior to the expiration date of this permit to continue the discharge beyond the expiration date of this permit. If a technologically proven alternative system is available and;
 - a) The overboard discharge owner is eligible for grant funding², the alternative system must be installed within 180 days of written notification from the Department, unless otherwise provided by *Conditions of licenses*, 38 M.R.S. § 414-A(1-B); or
 - b) The overboard discharge owner is not eligible for grant funding, the alternative system must be installed prior to the expiration date of this permit.
3. **Abandonment of Overboard Discharge.** When an overboard discharge is no longer necessary or is replaced by technologically proven alternative system, it must be properly abandoned within 90 days following the requirements of *Overboard discharges: licenses and abandonment*, 06-096 CMR 596(8), including submission of Overboard Discharge Abandonment Certification Form #DEPLW0653A. A Licensed Site Evaluator has determined that installation of a subsurface wastewater system *is* practicable on land owned or controlled by the applicant in conformance with the State of Maine Subsurface Waste Water Disposal Rules. The applicant has indicated that a replacement system is in the planning stages but is dependent on funding. While funding may be available as soon as 2022, it is not guaranteed. The Department is not requiring removal of the OBD system at this time.

H. OPERATION & MAINTENANCE (O&M) PLAN

This facility must have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan must provide a systematic approach by which the permittee shall 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 EPA personnel upon request.

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

² Grant eligibility is based on the cost-share schedule under *State contribution to residential overboard discharge replacement projects*, 38 M.R.S. § 411-A.

SPECIAL CONDITIONS

I. SEPTIC TANKS

1. Septic tanks and other treatment tanks must be regularly inspected (at least once per calendar year) and maintained to ensure that they are providing best practicable treatment. The permittee must maintain logs of inspections/maintenance that records the date, notes on observations, repairs conducted etc. The logs must be maintained on site at all times and made available to Department personnel upon request.
2. Tank contents should be removed whenever the sludge and scum occupy one-third of the tank's liquid capacity or whenever levels approach maximum design capacity. Following pumping, the tanks must be checked for damage at key joints and the inlet and outlet baffles and repaired promptly if damaged. The permittee must keep a pumping log including the date of pumping, quantity of material removed, name and number of the licensed contractor, pumping frequency and other relevant observations.

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 and 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

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 effluent or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

L. SEVERABILITY

In the event that any provision or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect and shall 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**

PROPOSED DRAFT FACT SHEET

Date: **July 2, 2019**

MEPDES PERMIT: **ME0090051**
WASTE DISCHARGE LICENSE: **W003610-5E-E-R**

NAME AND ADDRESS OF APPLICANT:

**NATIONAL PARK SERVICE
Acadia National Park
Schoodic Institute
P.O Box 177
Winter Harbor, ME 04609**

COUNTY: **Hancock County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:
**Acadia National Park
Arey Cove
Winter Harbor, ME**

RECEIVING WATER / CLASSIFICATION: **Arey Cove, Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Robert Bechtold**
(207) 288-8752
Bob_bechtold@nps.gov

1. APPLICATION SUMMARY

- a. Application – On June 24, 2019, the Department accepted as complete for processing an application from the National Park Service, Schoodic Institute (permittee) for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0090051/Maine Waste Discharge License (WDL) #W003610-5E-D-R issued by the Department on August 20, 2014, for a five-year term. The 8/20/14 Permit authorized the year round, monthly average discharge of 45,000 gallons per day (gpd) of secondary treated wastewater from (Outfall #001A) to Arey Cove, Class SB, Winter Harbor, Maine. See **Attachment A** of this Fact Sheet for a location map of the facility.

1. APPLICATION SUMMARY (cont'd)

- b. Source description: Sanitary waste waters are generated from The Schoodic Institute, an educational and research facility operating in partnership with and within the confines of Acadia National Park and its boundaries. See **Attachment B** of this Fact Sheet for a detailed listing of the structures/dwellings/buildings authorized by this permit and a layout of the facility.
- c. Wastewater treatment: The waste water receives a secondary level of treatment from a mechanical treatment plant containing a comminutor, twin rotating biological contactors (RBC) units and a settling tank. The treatment facility is designed to treat up to 45,000 gpd. The treated waste water is discharged into Arey Cove, Class SB, Winter Harbor, Maine via a ten (10) inch diameter cast iron outfall pipe (without diffuser) five feet below the mean low water line. The waste water treatment facility, at the time of this permitting action, is operated by Mr. Ken Locke (license # 584), a **Grade V** certified operator.
- d. Replacement Options: In May of 2003, the State Legislature adopted several amendments to the licensing of overboard discharges and the Department revised its rule Chapter 596, *Overboard Discharges: Licensing and Abandonment*, accordingly. One of the amendments in the revised rule required OBD owners that were applying to the Department to renew their OBD license, to hire a licensed site evaluator (LSE) to determine whether there is a technologically feasible replacement of the existing system prior to license renewal and install the replacement system within 180 days if grant money is offered by the Department. A Licensed Site Evaluator has determined that installation of a subsurface wastewater system *is* practicable on land owned or controlled by the applicant in conformance with the State of Maine Subsurface Waste Water Disposal Rules. The applicant has indicated that a replacement system is in the planning stages but is dependent on funding. While funding may be available as soon as 2022, it is not guaranteed. The Department is not requiring removal of the OBD system at this time.

2. PERMIT SUMMARY

- a. Terms and Conditions: - This permit is carrying forward all the terms and conditions of the previous permitting action and;
 1. Establishing seasonal (April 15 – October 31st) monthly average and daily maximum water quality-based limitations and monitoring requirements for enterococcus bacteria along with a compliance schedule to come into compliance with said limitations.
 2. Establishing more stringent limitations for fecal coliform bacteria based on the most current revisions to the National Shellfish Sanitation Program.
 3. For calendar year 2019, increasing the timeframe when fecal coliform bacteria limits are in effect from May 15 – September 30 to April 15 – October 31 based on a revision to Maine law, 38 M.R.S. §465(3)(B) effective August 2, 2018. Beginning April 15, 2020, fecal coliform limitations and monitoring requirements will in effect on a year-round basis.

3. PERMIT SUMMARY (cont'd)

- b. Facility History: - This section provides a summary of the most significant historical events for Acadia National Park, Schoodic Institute.

November 27, 1995 – The Department issued WDL #W003610-5E-A-R to The United States Navy - Naval Security Group Activity, for a ten-year term.

June 30, 2003 – The Department issued WDL #W003610-5E-B-T transferring the permit to Acadia National Park, Department of Interior, for the remainder of the term.

August 14, 2009 – The Department issued combination MEPDES permit ME0090051 / WDL #W003610-5E-C-R to Acadia National Park, Department of Interior, for a five-year term.

August 20, 2014 - The Department issued combination MEPDES permit ME0090051 / WDL #W003610-5E-D-R to Acadia National Park, Department of Interior, for a five-year term.

June 24, 2019 – Acadia National Park, Department of Interior, submitted a timely and complete application for renewal of combination MEPDES permit ME0090051 / WDL #W003610-5E-D-R. The application was accepted for processing in June 24, 2019 and assigned WDL #W003610-5E-E-R.

3. CONDITIONS OF PERMIT

Maine law, 38 M.R.S. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, 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

Maine law, 38 M.R.S. §469(3-A) classifies New Harbor at the point of discharge as a Class SB waterbody. Maine law, 38 M.R.S. §465-B(2) contains the standards for Class SB water bodies.

Class SB waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other estuarine and marine life. The habitat must be characterized as unimpaired.

The dissolved oxygen content of Class SB waters may not be less than 85% of saturation. Between April 15th and October 31st, the number of enterococcus bacteria in these waters may not exceed a geometric mean of 8 CFU per 100 milliliters in any 90-day interval or 54 CFU per 100 milliliters in more than 10% of the samples in any 90-day interval. The number of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration.

Discharges to Class SB waters may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all estuarine and marine species indigenous to the receiving water without detrimental changes in the resident biological community. There may be no new discharge to Class SB waters that would cause closure of open shellfish areas by the Department of Marine Resources. 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 estuarine and marine 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 paragraph, 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 2016 Integrated Water Quality Monitoring and Assessment Report published by the Department pursuant to Section 305(b) of the Federal Water Pollution Control Act lists the area of discharge at Arey Cove, in Winter Harbor as:

Category 2: Estuarine and Marine Waters Attaining Some Designated Uses – Insufficient Information for Other Uses. Impairment in this context is in regard to the designated use of harvesting of shellfish which is prohibited due to overboard discharges.

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

The Maine Department of Marine Resources (MDMR) shellfish harvesting Area #52, (Schoodic Point to Corea, Winter Harbor-Gouldsboro), is closed to the harvesting of shellfish. See **Attachment C** of this Fact Sheet for a map of Area #52. The MDMR closes or restricts areas based on ambient water quality data that indicate the area did not meet or marginally met the standards in the National Shellfish Sanitation Program. In addition, MDMR closes areas by default in the vicinity of outfall pipes associated with treated sanitary waste water discharges in the event of a failure of the disinfection system. Area 25-C remains closed as of the date of this permitting action.

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

Department rule Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, establishes controls on the discharge of mercury to the surface waters of the State through interim effluent limits and implementation of pollution prevention plans. However, Section 1(A)(1) of the Chapter 519 rule states, in part:

“This rule applies to all persons licensed or permitted pursuant to 38 M.R.S. §413 to discharge pollutants to the surface waters of the State except as described below. For the purposes of this rule, the term ‘licensee’ also means, ‘permittee.’

Categorical exclusions: This rule does not apply to the following categories of licensees: combined sewer overflows, snow dumps, pesticide applications, and over board discharges licensed pursuant to 38 M.R.S. §413.[emphasis added] Except, however, specific members of these categories may be required by the department to comply with this rule on a case by case basis...”

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Best Practicable Treatment (BPT) - The Department will find that the discharge meets the requirements of best practicable treatment pursuant to 38 M.R.S. § 414-A(1-B) for purposes of permitting when it finds that there are no technologically proven alternative methods of wastewater disposal consistent with the plumbing code adopted by the Department of Health and Human Services pursuant to Title 22, section 42 that will not result in an overboard discharge. Pursuant to *Overboard Discharges: Licensing and Abandonment*, 06-096 CMR 596(9), *Criteria and Standards for Waste Discharge Licenses* 06-096 CMR 524(2) (effective January 12, 2001) and 06-096 CMR 525(3)(III), BPT for overboard discharges is secondary treatment.
- b. Flow: The permittee is authorized a year-round, average monthly flow of 45,000 (gpd). The limit was established in a previous permitting action, reflects the design capacity of the existing wastewater treatment facility and is carried forward in this permitting action.

A review of the monthly average flow data as reported on the Discharge Monitoring Reports (DMRs) submitted to the Department for the period beginning January 2015 – December 2018 indicates the following:

Flow (DMRs = 48)

Value	Limit (gpd)	Range (gpd)	Mean (gpd)
Monthly Average	45,000	576 – 10,161	3,599
Monthly Maximum	45,000	80 – 27,220	9,557

- c. Dilution Factors: Department Rule 06-096 CMR, Chapter 530, Surface Water Toxics Control Program, §4(A)(2) states,
 - (2) *For estuaries where tidal flow is dominant and marine discharges, dilution factors are calculated as follows. These methods may be supplemented with additional information such as current studies or dye studies:*
 - (a) *For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.*
 - (b) *For discharges to estuaries, dilution must be calculated using a method such as MERGE, CORMIX or another predictive model determined by the Department to be appropriate for the site conditions.*
 - (c) *In the case of discharges to estuaries where tidal flow is dominant and marine waters, the human health criteria must be analyzed using a dilution equal to three times the chronic dilution factor.*

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

With a permitted flow of 45,000 GPD and based on the location and configuration of the outfall structure, the Department has made a best professional judgment that dilution factors are as follows:

Acute = 80:1 Chronic = 191:1 Harmonic Mean(1) = 573:1

Footnote:

(1) Pursuant to Department rule Chapter 530, "Surface Water Toxics Control Program", §4(2)(c), the harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the USEPA publication "Technical Support Document for Water Quality-based Toxics Control" (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

- d. Biochemical Oxygen Demand (BOD5) and Total Suspended Solids (TSS): A previous permitting action established technology based monthly average, weekly average and daily maximum BOD5 and TSS concentration limits of 30 mg/L, 45 mg/L and 50 mg/L, respectively. The monthly average and weekly average concentration limits are based on secondary treatment requirements as defined in Department rule, 06-096 CMR Chapter 525(3)(III) and the daily maximum concentration limit of 50 mg/L is based on a best professional judgment by the Department of best practicable treatment (BPT). This permitting action is carrying forward all three technology-based concentration limits.

Also carried forward in this permitting action are the previously established mass limitations for BOD5 and TSS pursuant to Department rule Chapter 523, Waste Discharge License Conditions, Section 6, Calculating NPDES permit conditions, sub-section f(1) states that, "all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass...." The monthly average, weekly average and daily maximum BOD5 and TSS mass limitations are based on calculations using the permittee's daily maximum permitted flow limitation of 45,000 GPD (0.045 MGD) and the applicable concentration limits as follows:

Monthly Average Mass Limit: $(30 \text{ mg/L})(8.34 \text{ lbs/gallon})(0.045 \text{ MGD}) = 11 \text{ lbs/day}$

Weekly Average Mass Limit: $(45 \text{ mg/L})(8.34 \text{ lbs/gallon})(0.045 \text{ MGD}) = 17 \text{ lbs/day}$

Daily Maximum Mass Limit: $(50 \text{ mg/L})(8.34 \text{ lbs/gallon})(0.045 \text{ MGD}) = 19 \text{ lbs/day}$

A previous permitting action established a minimum monitoring frequency requirement of 2/Month for BOD5 and TSS that is being carried forward in this permitting action. Sampling conducted for BOD5 and TSS must consist of 8-hr composite samples no less than ten days apart.

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

A review of the discharge data as reported on the permittee's Discharge Monitoring Reports (DMR's) submitted to the Department for the period January 2015 – December 2018 indicates the following:

BOD concentration (DMRs = 48)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	1.4 – 29	9
Weekly Average	45	1.4 - 35	10
Daily Maximum	50	1.4 - 35	10

TSS concentration (DMRs = 48)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	1.5 – 23	9
Weekly Average	45	2 - 26	11
Daily Maximum	50	2 - 26	11

BOD Mass (DMRs = 48)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	11	0.10 – 1.10	.33
Weekly Average	17	0.10 – 1.60	.42
Daily Maximum	19	0.10 – 1.60	.44

TSS Mass (DMRs = 48)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	11	0.10 – 1.10	.37
Weekly Average	17	0.10 – 1.80	.46
Daily Maximum	19	0.10 – 1.80	.46

A previous permitting action established a requirement for a minimum of 85% removal of BOD5 and TSS pursuant to Chapter 525(3)(III)(a)(3) and (b)(3) of the Department's rules. This requirement is carried forward in this permitting action.

- e. Settleable Solids: A previous permitting action established a daily maximum BPT based concentration limit of 0.3 ml/L and the monitoring frequency of 2/Month. The 0.3 ml/L concentration limit and the 2/Month monitoring frequency are carried forward in this permitting action.

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

- f. Fecal Coliform bacteria: The previous permitting action established seasonal (May 15th – September 30th) water quality based monthly average concentration limit for fecal coliform bacteria of 15 colony form units (CFU)/100 ml (geometric mean) and a daily maximum of 50 CFU/100mL (instantaneous level) along with a 1/Week monitoring frequency. The water quality-based limits were consistent with the limits associated with the 2003 National Shellfish Sanitation Program (NSSP). This permitting action is carrying forward the 1/Week monitoring frequency and expanding the timeframe when fecal coliform bacteria limits are in effect from May 15 – September 30 to April 15 – October 31 for the calendar year 2019, based on a revision to Maine law 38 M.R.S. §465(3)(B) effective August 2, 2018. In addition, this permit is reducing the limits to 14 CFU/100 ml as a monthly and 34 CFU/100ml as a daily maximum to be consistent with the 2017 revisions to the NSSP. Based on comments received from the USEPA, fecal coliform limitations need to be imposed on a year-round basis to protect the designated use of shellfish harvesting, a year-round use. The Department understands that this facility is discharging on a seasonal basis only.

A review of the data as reported on the DMRs submitted to the Department for the period January 2015 – December 2018 indicates the monthly (geometric mean) and daily maximum E. coli bacteria discharged as follows:

Fecal Coliform Bacteria (DMRs = 20)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100ml)
Monthly Average	15	0 – 5.2	2
Daily Maximum	50	0 – 117	19

It is noted that there were four excursions during the period.

- g. Enterococcus bacteria – The previous permit did not establish limitations or monitoring requirements for enterococcus bacteria. Based on comments received from the USEPA, enterococcus bacteria limitations are necessary to protect the designation use of recreation in and on the water, a seasonal use. Pursuant to Maine law 38 M.R.S. §465(3)(B) effective August 2, 2018, monthly and daily maximum water quality-based limits of 8 CFU/100 ml and 54 CFU/100ml, respectively. The limitations are seasonal and apply from April 15th – October 31st of each year and the monitoring frequency is being established at 1/Week to be consistent with the monitoring frequency for fecal coliform bacteria. The Department is granting the permittee a schedule of compliance until April 15, 2021, to come into compliance with enterococcus bacteria limitations and monitoring requirements.

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

- h. Total Residual Chlorine (TRC): This permitting action carries forward the established daily maximum water quality-based TRC concentration limit of 1.0 mg/L at a testing frequency of 1/Week. Limitations on TRC are specified to ensure that ambient water quality standards are maintained at all times of the year 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 in Section 6c of this Fact Sheet, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

Calculated Acute (A) Criterion	Calculated Chronic (C) Criterion	A & C Dilution Factors	Acute Limit	Chronic Limit
0.013 mg/L	0.0075 mg/L	80:1(A) 191:1(C)	1.04 mg/L	1.43mg/L

A review of the daily maximum data as reported on the DMRs submitted to the Department for the period January 2015 – December 2018 indicates the following;

Total residual chlorine (DMRs = 20)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.34 – 1.00	0.77

- i. pH: The previous permitting action established a BPT pH range limit of 6.0 – 9.0 standard units (SU), pursuant to Department rule found at Chapter 525(3)(III)(c). This permitting action is carrying forward the range limit and the monitoring frequency of once per year to determine compliance.

7. 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 as permitted will not cause or contribute to the failure of the water body to meet standards for Class SB waters.

8. PUBLIC COMMENTS

Public notice of this application was made in the Bangor Daily Newspaper on or about June 21, 2019. 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 Chapter 522 of the Department’s rules.

9. DEPARTMENT CONTACTS

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

Irene Saumur
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 485-2404
e-mail: irene.saumur@maine.gov

10. RESPONSE TO COMMENTS

Reserved until the close of the formal 30-day public comment period.