# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





Mr. Robert Bechtold Acadia National Park P.O. Box 177 Bar Harbor, Maine 04609 July 18, 2014

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

**Proposed Draft** 

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 Monday, August 18, 2014. 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 Land & Water Quality Division of Water Quality Management 17 State House Station Augusta, ME 04333

If you have any questions regarding the matter, please feel free to call me at (207) 446-1875.

Sincerely,

Rodney Robert

Division of Water Quality Management Bureau of Land and Water Quality

Enc.

cc: Tanya Hovell, DEP/EMRO

Roeling Cose ,

Barry Mower, DEP/CMRO

Pam Parker, DEP/CRMO

Lori Mitchell, DEP/CMRO

Oliver Cox, DMR

Environmental Review, DMR

Environmental Review, DIFW

Kathleen Leyden, DACF

David Webster, USEPA

David Pincumbe, USEPA

Alex Rosenburg, USEPA

Olga Vergara, USEPA

Ivy Frignoca, CLF



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

#### **DEPARTMENT ORDER**

# IN THE MATTER OF

NATIONAL PARK SE	RVICE	)	MAINE POLLUTANT DISCHARGE
ACADIA NATIONAL	PARK,	)	ELIMINATION SYSTEM PERMIT
SCHOODIC FACILIT	Y	)	
WINTER HARBOR, H	ANCOCK COUNTY	MAINE)	AND
ME0090051		)	WASTE DISCHARGE LICENSE
W003610-5E-D-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.A. 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 May 12, 2014, 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-C-R (permit) which was issued by the Department on August 14, 2009, for a five year term. The 8/14/09 permit, modified on 9/23/10, authorized the year round, monthly average discharge of 45,000 gallons per day (gpd) of secondary treated waste waters from (Outfall #001A) to Arey Cove, Class SB, Winter Harbor, Maine.

## PERMIT SUMMARY

# This permitting action is similar to the 8/14/2009 permitting action and 9/23/2010 administrative modification in that it is:

- 1. Carrying forward the year round, monthly average discharge of 0.045 million gallons per day (MGD) and the daily maximum flow reporting requirement.
- 2. Carrying forward the monthly average, weekly average, and daily maximum technology-based concentration and mass limitations for biochemical oxygen demand (BOD<sub>5</sub>) and total suspended solids (TSS);
- 3. Carrying forward the requirements for a minimum of 85% removal of BOD<sub>5</sub> and TSS;
- 4. Carrying forward the monthly average and daily maximum limits and measurement frequency for Fecal Coliform.
- 5. Carrying forward the pH range limitation of 6.0 to 9.0 standard units (SU);
- 6. Carrying forward the requirement for the person who has the management responsibility over the treatment facility to 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.A., Sections 4171-4182 and Regulations for Wastewater Operator Certification, 06-096 CMR 531 (effective May 8, 2006).

# This permitting action is different from the 8/14/2009 permitting action and 9/23/2010 administrative modification in that it is:

- 1. Establishing a requirement for BOD<sub>5</sub> and TSS testing to be eight (8) hour tests with the two (2) tests being no less than ten (10) days apart.
- 2. Removing the NODI-9 reporting option for BOD<sub>5</sub> and TSS when the monthly average influent is 200ml or less.
- 3. Establishing a pH measurement frequency of once per year (1/365) to ensure compliance with the 6.0-9.0 range limit.

# **CONCLUSIONS**

BASED on the findings in the attached **PROPOSED DRAFT Fact Sheet** dated July 18, 2014, 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.A. §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.A., §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.A. §10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (amended August 25, 2013)]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES	
DONE AND DATED AT AUGUSTA, MAINE, THIS DAY OF	2014.
DEPARTMENT OF ENVIRONMENTAL PROTECTION	
BY: PATRICIA W. AHO, Commissioner	
Date of initial receipt of application 05/12/14 Date of application acceptance 05/14/14	
Date filed with Board of Environmental Protection	
This Order prepared by Rodney Robert, Bureau of Land and Water Quality	

Page 5 of 10

# **SPECIAL CONDITIONS**

# A. EFFLUENT LIMITATIONS AND MONITORES REQUIREMENTS

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

Effluent Characteristic Discharge Limitations Monitoring Requirements

						Tromoring recommends		
	<b>Monthly</b>	<u>Weekly</u>	<b>Daily</b>	<b>Monthly</b>	<b>Weekly</b>	<u>Daily</u>	Measurement	<b>Sample</b>
	<u>Average</u>	<u>Average</u>	<u>Maximum</u>	<u>Average</u>	<u>Average</u>	Maximum	<u>Frequency</u>	<u>Type</u>
Flow [50050]	45,000 gpd [07]		Report (gpd) [07]				Continuous [99/99]	Recorder [RC]
$BOD_5$	11 lbs/day	17 lbs/day	19 lbs/day	30 mg/L	45 mg/L	50 mg/L	2/Month	Composite <sup>(6)</sup>
[00310]	[26]	[26]	[26]	[19]	[19]	[19]	[02/30]	[08]
BOD <sub>5</sub> Percent Removal <sup>(2)</sup> [81010]				85% [23]			1/Month [01/30]	Calculate [CA]
TSS	11lbs/day	17 lbs/day	19 lbs/day	30 mg/L	45 mg/L	50 mg/L	2/Month	Composite <sup>(6)</sup>
[00530]	[26]	[26]	[26]	[19]	[19]	[19]	[02/30]	[08]
TSS Percent Removal <sup>(2)</sup> [81011]				85% [23]			1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]						0.3 ml/L [25]	2/Month <sup>(6)</sup> [02/30]	Grab [GR]
Fecal Coliform Bacteria <sup>(3)</sup> [31633] (May 15 – September 30)				15/100 ml <sup>(4)</sup> [13]		50/100 ml [13]	1/Week [01/07]	Grab [GR]
Total Residual Chlorine <sup>(5)</sup> [50060]						1.0 mg/L [19]	1/Week [01/07]	Grab [GR]
pH [00400]						6.0 – 9.0 SU [12]	1/Year [01/365]	Grab [GR]

Footnotes See Pages 6 and 7 of this permit for applicable footnotes.

# 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. Any change in sampling location must be approved by the Department in writing. 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.

Sampling – Sampling shall be conducted after the last treatment process such that samples are representative of what is actually being discharged to the receiving waters. Sampling shall be conducted in accordance with federally approved methods for sampling, handling and preservation. Samples shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services and in accordance with methods approved by 40 Code of Federal Regulations (CFR) Part 136. Samples that are sent to a POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended February 13, 2000).

All analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the RL achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL or reporting an estimated value ("J" flagged) is not acceptable and will be rejected by the Department. Reporting analytical data and its use in calculations must follow established Department guidelines specified in this permit or in available Department guidance documents.

2. **Percent Removal** – The treatment facility shall maintain a minimum of 85 percent removal of both BOD<sub>5</sub> and TSS for all flows receiving secondary treatment. The percent removal shall be calculated based on influent and effluent concentration values for BOD and TSS.

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

- 3. **Bacteria Limits** Fecal Coliform bacteria limits and monitoring requirements are in effect between May 15<sup>th</sup> and September 30<sup>th</sup> of each year. The Department reserves the right to require year-round disinfection to protect the health, safety, and welfare of the public.
- 4. **Bacteria Reporting** The monthly average *fecal coliform* bacteria limitation is a **geometric mean** limitation and sample results shall be reported as such.
- 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.
- 6. **BOD**<sub>5</sub> and **TSS Testing** Twice per month composite and/or grab tests will be 8hr tests no less than ten days apart.

#### **B. ANNUAL DISCHARGE FEES**

Pursuant to Maine law, 38 M.R.S.A. §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 shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.
- 2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated for the classification of the receiving waters.
- 3. The discharges shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages 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.A., 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 February 21, 2014; 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 B(5)(*Bypass*) of this permit.

# 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. For the purposes of this section, notice regarding substantial change shall 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. 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 by a licensed site evaluator with experience in designing systems for the replacement of overboard discharge systems.

The Department may not grant approval for a **permit transfer** if the site evaluation concludes that a non-discharging wastewater disposal system designed in compliance with the Maine Subsurface Waste Water Disposal Rules administered by the Maine Department of Health and Human Services, Division of Environmental Health can be installed as a replacement system for the overboard discharge.

The Department may not grant approval for a **permit renewal** if the site evaluation concludes that a non-discharging wastewater disposal system can be installed as a replacement system for the overboard discharge and the Department has offered the permittee funding for the removal of the discharge.

# H. DISINFECTION

If chlorination is used as a means of disinfection, an approved chlorine contact tank providing the proper detention time consistent with good engineering practice must be utilized, followed by a dechlorination system if the total residual chlorine (TRC) cannot be met by dissipation in the detention tank. The TRC in the effluent shall at no time cause any demonstrable harm to aquatic life in the receiving waters. The dose of chlorine applied shall be sufficient to leave a TRC concentration that will effectively reduce bacteria to levels below those specified in Special Condition A, "Effluent Limitations and Monitoring Requirements," above.

# I. OPERATION & MAINTENANCE (O&M) PLAN

This facility shall have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain 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 shall evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date.

The O&M Plan shall be kept on-site at all times and made available to Department and EPA personnel upon request.

Within 90 days of completion of new and or substantial upgrades of the waste water treatment facility (excepting the current yet to be completed substantial upgrade), the permittee shall submit the updated O&M Plan to their Department inspector for review and comment.

# J. MONITORING AND REPORTING

Monitoring results shall be summarized monthly and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and postmarked on or before the thirteenth (13<sup>th</sup>) day of the month or hand-delivered to a Department Regional Office such that the DMR's are received by the Department on or before the fifteenth (15<sup>th</sup>) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the Department's compliance inspector (unless otherwise specified) at the following address:

Compliance Inspector
Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management
106 Hogan Road,
Bangor, Maine 04401

Alternatively, if submitting an electronic DMR (eDMR), the completed eDMR must be electronically submitted to the Department by a facility authorized DMR Signatory not later than close of business on the 15<sup>th</sup> day of the month following the completed reporting period. Hard Copy documentation submitted in support of the eDMR must be postmarked on or before the thirteenth (13<sup>th</sup>) day of the month or hand-delivered to the Department's Regional Office such that it is received by the Department on or before the fifteenth (15<sup>th</sup>) day of the month following the completed reporting period. Electronic documentation in support of the eDMR must be submitted not later than close of business on the 15<sup>th</sup> 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 18, 2014

MEPDES PERMIT: ME0090051

WASTE DISCHARGE LICENSE: W003610-5E-D-R

NAME AND ADDRESS OF APPLICANT:

NATIONAL PARK SERVICE
Acadia National Park
Schoodic Facility
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. <u>Application</u> – On May 12, 2014, 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-C-R (permit) which was issued by the Department on August 14, 2009, for a five year term. The 8/14/09 permit, administratively modified on 9/23/10, authorized the year round, monthly average discharge of 45,000 gallons per day (gpd) of secondary treated waste waters 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. <u>Source description</u>: 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. Historically, the facility was operated by the U.S. Navy until the grounds were turned over to the National Park Service who assumed responsibility for permitted discharges on June 30, 2003. See **Attachment B** of this Fact Sheet for a detailed layout of the facility.
- c. Waste water 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 an eight (8) 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. However, the Department has not offered the applicant a grant of money to remove the overboard discharge. Therefore, this permit is being renewed for a five-year term.

## 2. PERMIT SUMMARY

# This permitting action is similar to the 8/14/2009 permitting action and 9/23/2010 administrative modification in that it is:

- 1. Carrying forward the year round, monthly average discharge of 0.045 million gallons per day (MGD) and the daily maximum flow reporting requirement.
- 2. Carrying forward the monthly average, weekly average, and daily maximum technology-based concentration and mass limitations for biochemical oxygen demand (BOD5) and total suspended solids (TSS);
- 3. Carrying forward the requirements for a minimum of 85% removal of BOD5 and TSS;
- 4. Carrying forward the monthly average and daily maximum limits and measurement frequency for Fecal Coliform.
- 5. Carrying forward the pH range limitation of 6.0 to 9.0 standard units (SU);
- 6. Carrying forward the requirement for the person who has the management responsibility over the treatment facility to 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.A., Sections 4171-4182 and Regulations for Wastewater Operator Certification, 06-096 CMR 531 (effective May 8, 2006).

# This permitting action is different from the 8/14/2009 permitting action and 9/23/2010 administrative modification in that it is:

- 1. Establishing a requirement for BOD5 and TSS testing to be eight (8) hour tests with the two (2) tests being no less than ten (10) days apart.
- 2. Removing the NODI 9 reporting option for BOD5 and TSS when the monthly average influent is 200ml or less.
- 3. Establishing a pH measurement frequency of once per year (1/365) to ensure compliance with the 6.0-9.0 range limit.

## 3. CONDITIONS OF PERMIT

Maine law, 38 M.R.S.A. 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.A., 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.A., Section 469, classifies Arey Cove, the receiving waterbody at the point of discharge as Class SB water. Maine Law, 38 M.R.S.A., Section 465-B(2) describes the classification standards for Class SB waters.

# 5. RECEIVING WATER QUALITY CONDITIONS

<u>The 2012 Integrated Water Quality Monitoring and Assessment Report</u> published by the Department pursuant to Section 305(b) of the Federal Water Pollution Control Act lists the area of discharge as: Waterbody ID # 714-18, Arey Cove, Winter Harbor.

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

<u>Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants</u>. 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.

The Maine Department of Marine Resources (MDMR) assesses information on shellfish growing areas to ensure that shellfish harvested are safe for consumption. The DMR has authority to close shellfish harvesting areas wherever there is a pollution source, a potential pollution threat, or poor water quality.

The MDMR traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (in-stream thresholds established in the National Shellfish Sanitation Program) or maintains shellfish harvesting closure areas due to lack of updated information regarding ambient water quality conditions. It also 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.

# 5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

Shellfish harvesting Area #52, (Schoodic Point to Corea, Winter Harbor-Gouldsboro), sub-area #A(1) Arey Cove is closed to the harvesting of shellfish due to insufficient or limited ambient water quality data to determine that the area meets the standards in the National Shellfish Sanitation Program. See **Attachment C** of this Fact Sheet for a map of Area #52. Compliance with the seasonal fecal coliform bacteria limits in this permitting action will ensure that the discharge from the permittee's facility will not cause or contribute to the shellfish harvesting closure.

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 MRSA §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 MRSA §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) Overboard discharges may be permitted only where no technologically proven alternative exists. Overboard discharge treatment systems must be capable of meeting secondary treatment standards as described in CMR Chapter 525, Section 3 and Chapter 596 section 9, unless the Department finds that alternate limits are appropriate. After accepting a renewal application as complete for processing, the Department shall approve an overboard waste discharge license only if all of the following criteria are met.
  - (1) A publicly owned sewer line is not located on or abutting land owned or controlled by the applicant or is not available for the applicant's use.
  - (2) A subsurface wastewater disposal system cannot be installed in compliance with the Subsurface Rules, 10-144 CMR 241, on land owned or controlled by the applicant. Or, 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.

- (3) The discharge is not located within the boundaries of a sanitary or sewer district and the district has not agreed to service and maintain a holding tank at an annual fee that does not exceed those fees charged to other similar users of the district's services who are physically connected to the sewers of the district.
- (4) For a school, the volume or quantity of waste water that is discharged does not exceed;
- (a) the limit imposed by the previous license.
- (b) the actual or estimated flow at the time of current application if a license volume increase is necessary.
- (5) The receiving water is not:
- (a) A Class GPA, AA, A, or SA water;
- (b) A tributary to Class GPA water; or
- (c) A waterbody with a drainage area of less than 10 square miles,
- (6) The discharge meets the requirements of *Maine's Pollution Control Laws* 38 M.R.S.A. §414-A, and Maine's *Water Classification Laws* 38 M.R.S.A. §§ 464 to 469.
- (7) The discharge receives best practicable treatment consistent with requirements in Section 9 of Department rule Chapter 596.

The discharge from Acadia National Park's Schoodic Facility has met all the above criteria. 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. However, the Department has not offered the applicant a grant of money to remove the overboard discharge. Therefore, this permit is being renewed for a five-year term.

b. <u>Flow:</u> The permittee is authorized a year round, average monthly flow of 45,000 (gpd). The limit reflects the design capacity of the existing wastewater treatment facility. A review of the monthly average flow data as reported on the Discharge Monitoring Reports (DMRs) submitted to the Department for the period beginning July 2010 through July 2013 indicates the following

Flow (DMRs = 36)

Value	Limit (gpd)	Range (gpd)	Mean (gpd
Monthly Average	45,000	1103 - 7822	3,645
Monthly Maximum	45,000	3580 – 30,600	12,729

- c. <u>Dilution</u>: 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.

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. <u>Biochemical Oxygen Demand (BOD5)</u> and <u>Total Suspended Solids (TSS)</u>: The 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 mg/L)(8.34 lbs/gallon)(0.045 MGD) = 11 lbs/day

Weekly Average Mass Limit: (45 mg/L)(8.34 lbs/gallon)( 0.045 MGD) = 17 lbs/day

Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs/gallon)( 0.045 MGD) = 19 lbs/day

The 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. Tests conducted for BOD5 and TSS will be 8 hr tests no less than ten days apart.

A review of the discharge data as reported on the permittee's Discharge Monitoring Reports (DMR's) submitted to the Department for the period July 2010 - July 2013 (n=36) indicate the following:

# **BOD** concentration (DMRs = 36)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	2.5 - 20	7.21
Daily Maximum	50	3 - 23	8.83

# TSS concentration(DMRs = 36)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	2 - 18	9.33
Daily Maximum	50	2 - 29	12.03

# **BOD** Mass(DMRs = 36)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	11	0.1 -0.7	.28
Daily Maximum	19	0.1 - 0.8	.36

# TSS Mass(DMRs = 36)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	11	0.1 - 0.8	.35
Daily Maximum	19	0.1 - 0.9	.46

The previous permitting action is established a new 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. This permitting action is establishing a requirement for the twice monthly composite tests to be 8hrs in duration and at least ten days apart.

e. <u>Settleable Solids</u>: The previous permitting action established a Department BPT based daily maximum concentration limit of 0.3 ml/L and reduced the monitoring frequency from 5/Week to 2/Month. The 0.3 ml/L concentration limit and the 2/Month monitoring frequency are carried forward in this permitting action.

f. <u>Fecal Coliform bacteria</u>: This permitting action is carrying forward the monthly average water quality based limit of 15 colonies/100 ml and water quality based daily maximum concentration limit of 50 colonies/100 ml to be consistent with the limits associated with the National Shellfish Sanitation Program and to be consistent with limitations established in other like MEPDES permits. The bacteria limits established in this permitting action are seasonal and apply between May 15th and September 30th of each year to be consistent with the time frame established in Maine Law 38 M.R.S.A., §465 –B(2).

A review of the monthly average and daily maximum data as reported on the DMRs submitted to the Department for the period July 2010 – July 2013 indicates the monthly (geometric mean) and daily maximum E. coli bacteria discharged as follows:

Fecal Coliform Bacteria (DMRs = 15)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100ml)
Monthly Average	15	<1 – 5.4	1.77
Daily Maximum	50	1.0 - 137	22.07

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

Example Acute Limit Calculation: (0.019)(2) = 0.04

A review of the daily maximum data as reported on the DMRs submitted to the Department for the period July 2010 – July 2013 indicates the maximum TRC discharged has been as follows;

# Total residual chlorine (n=16)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.36 - 0.99	0.68

h. <u>pH:</u> 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 is establishing a regular 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 May 10, 2014. 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:

Rodney Robert Division of Water Quality Management Bureau of Land & Water Quality Department of Environmental Protection 17 State House Station

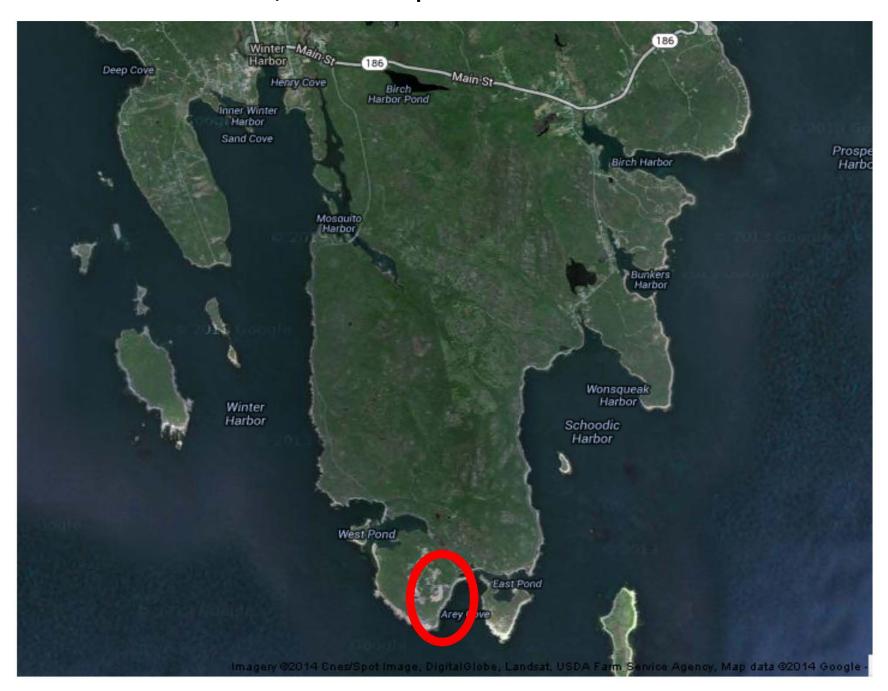
Augusta, Maine 04333-0017 Telephone: (207) 446-1875

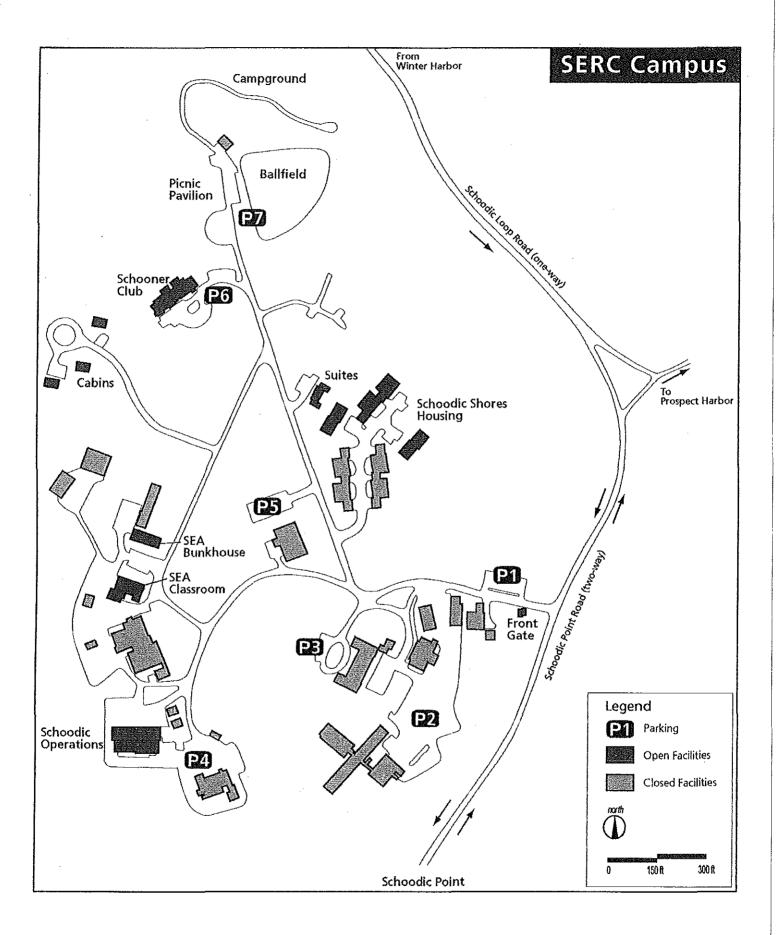
e-mail: rodney.robert@maine.gov

# 10. RESPONSE TO COMMENTS

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

# ME0090051 – Attachment A, Location Map





# NOTICE OF EMERGENCY RULE-MAKING

AGENCY: Department of Marine Resources STATUTORY AUTHORITY: 12 M.R.S. §§6172, 6192, 6193 & 6194 Struck text is being removed, and underlined text is being added

#### **BASIS STATEMENT**

The Commissioner of the Maine Department of Marine Resources amends the emergency DMR Chapter 95.04(FF) Area No. 52, Schoodic Point to Corea (Winter Harbor-Gouldsboro), amended on March 24, 2011. This notice reclassifies Long Mill Cove in Gouldsboro from approved to conditionally approved due to intermittent non-point source pollution. All existing pollution and red tide/psp closures remain in effect. As authorized by 12 M.R.S. §§6172, 6192, 6193 & 6194 the Commissioner of Marine Resources adopts emergency amendments to Chapter 95.04 (FF).

**RULE TITLE AND SUBJECT:** DMR Chapter 95.04(FF) Area No. 52, Schoodic Point to Corea (Winter Harbor-Gouldsboro), amended on March 24, 2011, is amended as follows:

**TITLE & TEXT OF RULE:** DMR Chapter 95.04(FF) Area No. 52, Schoodic Point to Corea (Winter Harbor-Gouldsboro)

- A. Effective immediately, because of pollution, it shall be unlawful to dig, take or possess any clams, quahogs, oysters, or mussels taken from the shores, flats, and waters of the following areas:
  - 1. Arey Cove, (Winter Harbor): north of a line drawn from the southeast tip of Big Moose Island east to the southwestern tip of Schoodic Point on Little Moose Island AND west of a line extending north from the northern tip of Little Moose Island to the mainland. East Pond Cove will remain approved.
  - 2. Bunkers Harbor (Gouldsboro): west of a line that begins at the southeast tip of Zynes Head (so called); then extends southeast to the CG navigation aid C"1" at Bunkers Ledge; then southwest to the southeast prominence of Spruce Point.
  - 3. Birch Harbor (Gouldsboro): northwest of a line starting at the eastern tip of an unnamed point on the southwest shore of Birch Harbor (this point is located 1800 feet southsoutheast of the Rt. 186 bridge at the head of the harbor) and extending northeast to another unnamed point on the north shore (this point is 1400 feet southeast of the Rt. 186 bridge).
  - 4. Forbes Stream (Gouldsboro): north of a line that begins at a red-painted post on a point of land at Albee's Cottages and then extends northeast across the mouth of Forbes Stream to a small shed on the opposite shore, 1200 feet south of the Rt. 186 bridge.
  - 5. Prospect Harbor (Gouldsboro): north of a line extending west from the light house on the southern tip of Prospect Harbor Point to a small un-named point of land on the west shore of Inner Harbor 2300 feet south of the mouth of Forbes Stream AND south of a line that begins at a red-painted post on a point of land at Albee's Cottages and extends northeast across the mouth of Forbes Stream to a small shed on the opposite-shore, 1200 feet south of the Rt. 186 bridge. This area is classified Restricted and requires a special MDMR permit.
  - 6.5. Prospect Harbor (Gouldsboro): northwest of a line that begins on the most southeastern tip of Pettees Point and runs northeast to the Coast Guard navigational aid "Gong 3" (east of Clarks Ledge), then continues across the mouth of Prospect

Harbor to the lighthouse on the southern tip of Prospect Harbor Point and then continues due west to an unnamed point on the west shore of Inner Harbor 2300 feet south of the mouth of Forbes Stream. This closure includes the shores of Pettees Point, Clark Point and the Inner Harbor

- 7. 6. Shark Cove (Gouldsboro): northeast of a line beginning at a red-painted post at the northwest mouth of Shark Cove, then extending southeast to a red-painted post on the southeast mouth of Shark Cove.
- 8. 7. Corea Harbor-Sand Cove (Gouldsboro): west of a line drawn starting at the most east tip of Sampson Point; then extending southeast to the west tip of Sheep Island and then north of a line continuing southwest to a red-painted post located on the southernmost tip of an un-named point at the western mouth of Corea Harbor.
- B. Prospect Harbor (Gouldsboro): north of a line extending west from the light house on the southern tip of Prospect Harbor Point to a small un-named point of land on the west shore of Inner Harbor 2300 feet south of the mouth of Forbes Stream AND south of a line that begins at a red-painted post on a point of land at Albee's Cottages and extends northeast across the mouth of Forbes Stream to a small shed on the opposite shore, 1200 feet south of the Rt. 186 bridge. This area is classified Restricted and requires a special MDMR permit.
- B<sub>-</sub> C. Effectively immediately, because of pollution, the shores, flats, and waters of Birch Harbor: southeast of a line starting at the eastern tip of an unnamed point on the southwest shore of Birch Harbor (this point is located 1800 feet south-southeast of the Rt. 186 bridge at the head of the harbor) and extending northeast to another unnamed point on the north shore (this point is 1400 feet southeast of the Rt. 186 bridge) AND northwest of a line beginning on the southeast tip of Pettees Point and extending approximately 2000 feet to an unnamed point on the south side of the mouth of Birch Harbor, have been classified as "Conditionally Approved". and shall be closed to the harvest of clams, quahogs, oysters and mussels from July 1 to October 31.
- D. Effectively immediately, because of pollution, the shores, flats, and waters of Long Mill Cove(Gouldsboro) west of a line beginning on the shore at the south eastern tip of an unnamed point on the north shore of Long Mill Cove, then running approximately 750 feet south to the opposite shore, have been classified as "Conditionally Approved" due to intermittent seasonal pollution and shall be closed to the harvest of clams, quahogs, oysters and mussels from May 1 to October 31.

EFFECTIVE DATE: February 3, 2012 EFFECTIVE TIME: 2:10 PM

AGENCY CONTACT PERSON: Kohl Kanwit, Department of Marine Resources, 194 McKown Point Road, W. Boothbay Harbor, Maine 04575 http://www.maine.gov/dmr/rm/public\_health/closures/closedarea.htm

EMAIL: Kohl.Kanwit@maine.gov

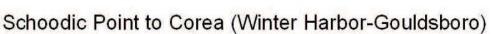


4,000

8,000 Feet

# **Maine Department of Marine Resources**

Pollution Area No. 52





Long Mill Cove Conditionally Approved area closed May 1 to October 31 Gouldsboro A 4. **Prospect Hbr Pt** Prospect Youngs 1 Harbor Corea Harbor Gong "3" Shark Cove Cranberry Pt Pettees Pt Birch Harbor Winter Harbor Birch Harbor Conditionally Approved area closed July 1 to October 31 **Zynes Head** A 2. **Bunkers Harbor** Schoodic Spruce Pt Point 8 red painted post Prohibited Moose Is Restricted Arey Cove Conditionally Approved