



STATE OF MAINE
Department of Environmental Protection

Paul R. Lepage
GOVERNOR

Patricia W. Aho
COMMISSIONER

December 22, 2014

Mr. Aaron Bateman
President, Phoenix Management
40 Water Street, P.O. Box 759
Saco, ME. 04072
e-mail: abateman@phoenixmanagementcompany.com

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0023248
Maine Waste Discharge License (WDL) Application #W006931-5C-I-R
Diamond Cove Homeowners Association
Proposed Draft Permit

Dear Mr. Bateman:

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, January 22, 2015**. 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

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-3901 FAX: (207) 287-3435
RAY BLDG., HOSPITAL ST.

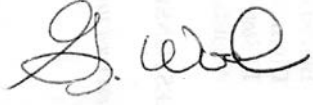
BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-6477 FAX: (207) 764-1507

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,

A handwritten signature in cursive script, appearing to read "G. Wood".

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

cc: William Johnson, DEP/CMRO
Barry Mower, DEP/CMRO
Lori Mitchell, DEP/CMRO
David Webster, USEPA
David Pincumbe, USEPA
Olga Vergara, USEPA
Marelyn Vega, USEPA
Maine Department of Marine Resources
Maine Department of Inland Fisheries & Wildlife
Joseph Payne, Casco Bay Keeper
Ivy Frignoca, CLF



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

DEPARTMENT ORDER

IN THE MATTER OF

DIAMOND COVE HOMEOWNERS ASSOCIATION)	MAINE POLLUTANT DISCHARGE
PORTLAND, CUMBERLAND COUNTY, MAINE)	ELIMINATION SYSTEM PERMIT
OVERBOARD DISCHARGE)	AND
ME0023248)	WASTE DISCHARGE LICENSE
W006931-5C-I-R)	RENEWAL
	APPROVAL	

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, *et seq.* and Maine Law 38 M.R.S.A. Section 414-A, *et seq.*, and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the DIAMOND COVE HOMEOWNERS ASSOCIATION (permittee hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The permittee has submitted a timely and complete application to the Department for the renewal of Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0023248/Maine Waste Discharge License (WDL) #W006931-5C-F-R (permit hereinafter) which was issued by the Department on September 15, 2009, for a five-year term. The permit authorized a year-round monthly average discharge of up to 35,000 gallons per day (gpd) of secondary treated waste waters to the Atlantic Ocean (Casco Bay), Class SC, in Portland, Maine.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the September 15, 2009, permit except that this permit is:

1. Eliminating Special Condition C, *Disinfection*, from the permit as the Department has reconsidered the need for said condition.
2. Eliminating Special Condition K, *Treatment System Repairs and Maintenance*, as the terms and conditions in the condition have been satisfied.
3. Establishing a requirement to maintain a minimum of 85% removal for biochemical oxygen demand (BOD) and total suspended solids (TSS) pursuant to 06-096 CMR, Chapter 525, §3, sub-§III.

PERMIT SUMMARY (cont'd)

4. Reducing the monitoring frequency for settleable solids from 1/Month to 1/Year as test results submitted to date indicate settleable solids have never been detected in the effluent.

CONCLUSIONS

BASED on the findings in the attached **PROPOSED DRAFT** Fact Sheet dated December 22, 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 subsurface wastewater disposal system can not be installed in compliance with the Maine Subsurface Waste Water Disposal Rules at the time the renewal application was accepted by the Department.

CONCLUSIONS (cont'd)

- 7. A publicly owned sewer line is not located on or abutting land owned or controlled by the permittee or is not available for the permittee's use.
- 8. The discharge is not located within the boundaries of a sanitary district or sewer district.

ACTION

THEREFORE, the Department APPROVES the above noted application of the DIAMOND COVE HOMEOWNERS ASSOCIATION to discharge a monthly average flow of up to 35,000 gpd of secondary treated sanitary waste water to the Atlantic Ocean (Casco Bay), Class SC, in Portland, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

- 1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable to All Permits," revised July 1, 2002, copy attached.
- 2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
- 3. This permit and the authorization to discharge become effective upon the date of signature below and expire at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the authorization to discharge and the terms and conditions of this permit and all modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. [Maine Administrative Procedure Act, 5 M.R.S.A. § 10002 and Rules Concerning the Processing of Applications and Other Administrative Matters, 06-096 CMR 2(21)(A) (effective April 1, 2003)].

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS ____ DAY OF _____, 2015.
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
Patricia W. Aho, Commissioner

Date of initial receipt of application: November 26, 2014.
Date of application acceptance: November 26, 2014.

Date filed with Board of Environmental Protection _____.
This Order prepared by Gregg Wood, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- The permittee is authorized to discharge **secondary treated sanitary wastewater from Outfall #001** to Atlantic Ocean, Class SC. 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 <i>[50050]</i>	35,000 gpd <i>[07]</i>	Report gpd <i>[07]</i>	Report gpd <i>[07]</i>	---	---	---	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>
BOD₅ <i>[00310]</i>	9 lbs/day <i>[26]</i>	13 lbs/day <i>[26]</i>	15 lbs/day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Month <i>[01/30]</i>	Grab <i>[GR]</i>
BOD₅ Percent Removal⁽²⁾ <i>[81010]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
TSS <i>[00530]</i>	9 lbs/day <i>[26]</i>	13 lbs/day <i>[26]</i>	15 lbs/day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Month <i>[01/30]</i>	Grab <i>[GR]</i>
TSS Percent Removal⁽²⁾ <i>[81011]</i>	---	---	---	85% <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
Settleable Solids <i>[00545]</i>	---	---	---	---	---	0.3 ml/L <i>[25]</i>	1/Year <i>[01YR]</i>	Grab <i>[GR]</i>
Fecal coliform bacteria⁽³⁾ <i>(May 15 – Sept. 30) [31633]</i>	---	---	---	15/100 ml ⁽³⁾ <i>[13]</i>	---	50/100 ml <i>[13]</i>	1/Week <i>[01/07]</i>	Grab <i>[GR]</i>
Total Residual Chlorine⁽⁴⁾ <i>[50060]</i>	---	---	---	---	---	1.0 mg/L <i>[19]</i>	5/Week <i>[05/07]</i>	Grab <i>[GR]</i>
pH <i>[00400]</i>	---	---	---	---	---	6.0 – 9.0 SU _[12]	1/Week <i>[01/07]</i>	Measure <i>[MS]</i>
The italicized numeric values bracketed in the table and in subsequent text are code numbers Department personnel utilize to code the monthly Discharge Monitoring Reports.								

FOOTNOTES: See pages 5&6 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes:

1. **Monitoring** – All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process and shall be representative of the effluent discharged to the receiving water. Sampling and analysis must be conducted in accordance with; a) methods approved in 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 Human Services. Samples that are 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).
2. **Percent Removal** - The permittee must achieve a minimum of 85 percent removal of both total suspended solids (TSS) and biochemical oxygen demand (BOD) for all flows receiving secondary treatment. The percent removal is calculated based on influent and effluent concentration values. For influent concentrations an assumed value of 290 mg/L will be used for TSS and BOD.
2. **Fecal coliform bacteria** – The monthly average limitation of 15 colonies/100 mL is a geometric mean limitation and results shall be calculated and reported as such.
4. **Total residual chlorine (TRC) limits and monitoring requirements** – TRC limits and monitoring requirements are applicable whenever elemental chlorine or chlorine-based compounds are being used to disinfect the discharge. TRC shall be tested using an EPA-approved method that is capable of bracketing the TRC concentration limitations in this permit. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public.

SPECIAL CONDITIONS

B. 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.

C. TREATMENT PLANT OPERATOR

The person who has the management responsibility over the treatment facility must hold a **Maine Grade II** Waste Water Treatment Plant Operator 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.

D. 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 September 2, 2014; 2) the terms and conditions of this permit; and 3) from Outfall #001 only. 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), *Bypasses*, of this permit.

This permit specifically excludes introduction of wastewater directly or indirectly from the redevelopment of the Hospital and the proposed Inn swimming pool. This permit authorizes the inclusion of wastewater resulting from the general practice of hotels and inns to have kitchen facilities to support food and beverage services so long as the food and beverage service provided, and the kitchen facilities used, are customary for a residential hotel condominium and such services are provided to, and the kitchen facilities are used to prepare food and beverages solely for, owners of the units at the Inn and the registered guests at the Inn.

SPECIAL CONDITIONS

E. 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.

F. 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.

G. OPERATION & MAINTENANCE (O&M) PLAN

The permittee shall have a current written comprehensive Operation & Maintenance (O&M) Plan for the waste water treatment facility. 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.

SPECIAL CONDITIONS

G. OPERATION & MAINTENANCE (O&M) PLAN (cont'd)

The permittee shall establish a "Wet Weather Management Plan" as part of the O & M plan. This plan would direct the staff on how to operate the facility effectively during periods of high flow, including operating procedures for a range of intensities, solids handling procedures, and provide written operating and maintenance procedures during the events.

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, the permittee shall submit the updated O&M Plan to their Department inspector for review and comment.

H. SEPTIC TANKS

Septic tanks and other treatment tanks shall be regularly inspected (at least once per year) and maintained to ensure that they are providing best practicable treatment. The permittee shall maintain logs of inspections/maintenance that records the date, notes on observations, repairs conducted etc. The logs shall be maintained on site at all times and made available to Department personnel upon request.

Tank contents should be removed whenever the sludge and scum occupies one-third of the tank's liquid capacity or whenever levels approach maximum design capacity. Following pumping, the tanks shall be checked for damage at key joints and the inlet and outlet baffles, and repaired promptly if damaged. The permittee shall keep a pumping log including the date of pumping, quantity of material removed, name and number of licensed contractor, pumping frequency and other relevant observations.

I. 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.

SPECIAL CONDITIONS

J. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Forms (DMR's) provided by the Department. The DMR's must be postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office such that the DMR's are received by the Department on or before the fifteenth (15th) 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 following address:

Overboard Discharge Inspector
Department of Environmental Protection
Bureau of Land and Water Quality
17 State House Station
Augusta, Maine 04333-0017

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 15th 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 (13th) 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 (15th) 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 15th day of the month following the completed reporting period.

K. 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 permit is sufficient grounds for accruing interest charges, penalties or revocation of the license.

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**

FACT SHEET

Date: **December 22, 2014**

MEPDES PERMIT: **ME0023248**
WASTE DISCHARGE LICENSE: **W006931-5C-I-R**

NAME AND ADDRESS OF APPLICANTS:

DIAMOND COVE HOMEOWNERS ASSOCIATION
c/o Phoenix Management Company
Attn: Aaron Bateman, President
P.O. Box 759
Saco, Maine 04101
(207) 571-3061
abateman@phoenixmanagementcompany.com

COUNTY: **Cumberland County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Great Diamond Island
Portland, ME. 04109

RECEIVING WATER / CLASSIFICATION: **Atlantic Ocean (Casco Bay)/Class SC**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Aaron Bateman, Agent**
(207) 571-3061
e-mail: abateman@phoenixmanagementcompany.com

1. APPLICATION SUMMARY

- a. Application - The applicant/permittee has submitted a timely and complete application to the Department for the renewal of Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0023248/Maine Waste Discharge License (WDL) #W006931-5C-F-R (permit hereinafter) which was issued by the Department on September 15, 2009, for a five-year term. The permit authorized a year-round monthly average discharge of up to 35,000 gallons per day (gpd) of secondary treated waste waters to the Atlantic Ocean (Casco Bay), Class SC, in Portland, Maine.

1. APPLICATION SUMMARY (cont'd)

- b. Source Description - Wastewater is generated by Phase I development of Department Site Location Order #L-013160-87/03-A-N. This development, located on a 193.4-acre portion of Great Diamond Island, consists of 44 buildings. Of the buildings, 36 were to be converted to 134 housing units; five were to be commercial uses, and two for recreational uses. To date all but four of the 36 buildings have been renovated: Housing units 83F-690-69 (Devine) and 83F-700-70 (Devine), the Barracks and the Hospital.

The September 15, 2009, permit authorized the introduction of wastewater to the OBD treatment system resulting from the redevelopment of the Barracks into a 46-bedroom hotel/condominium by The Inn at Diamond Cove, LLC (Inn). Both the Barracks and the Hospital were acquired by the City of Portland and then deeded to The Inn at Diamond Cove, LLC per the Purchase and Sales Agreement dated May 4, 2007. Maine law, 38 M.R.S.A. §413.3 requires a Licensed Site Evaluator/Professional Engineer to conduct a site evaluation prior to transfer of a facility served by an OBD. The transferee must replace the OBD using an alternative system if there is a feasible alternative. The Inns' LSE found no alternative to the use of the OBD by the Barracks. Sufficient treatment capacity remains for connection of the Barracks to the existing OBD.

The September 15, 2009, permit prohibited wastewater (including inflow and/or infiltration) from the Hospital from inclusion in the wastewater influent to the existing OBD sand filter treatment system pursuant to Maine law, 38 M.R.S.A. §413.3. There is a feasible alternative to use of the existing OBD treatment and the existing treatment works does not have sufficient treatment capacity to accept wastewater resulting from the future and subsequent redevelopment of the "Hospital."

The September 15, 2009, permit specifically prohibited wastewater from the proposed swimming pool to the existing OBD sand filter treatment system pursuant to Maine law, 38 M.R.S.A. § 464.A.6. The 1986 Site Order did not authorize a second pool. Therefore, connection of the pool to the OBD, would constitute an additional source of discharge and is prohibited.

- c. Waste Water Treatment – The effluent currently receives a secondary level of treatment. The raw sewage is collected from the existing development by a network of approximate 4,200 linear feet of new PVC and 1,900 feet of clay piping, all has been relined in the last ten years. The raw sewage is distributed between six 10,000-gallon settling tanks configured in two rows of three tanks.

Supernatant from the settling tanks is collected in a wet well and distributed amongst three 100-ft. by 115-ft. (11,500 sq. ft.) sand filter beds. The treated wastewater is collected in the underdrain system and conveyed to a disinfection system consisting of liquid sodium hypochlorite disinfection and two 1,000-gallon detention tanks. Dechlorination is accomplished through sodium bisulfate injection. The sanitary treated

1. APPLICATION SUMMARY (cont'd)

wastewater then travels through a V-notch weir-type flowmeter before being discharged to Casco Bay through an eight-inch diameter outfall pipe with diffuser. The outfall pipe extends approximately 250 feet from the shoreline to a point where there is approximately twelve vertical feet of water over the crown of the pipe at mean low water. The wastewater treatment facility is operated by a contractor operator. The treatment capacity for the installed sand filter system is 35,000 gpd.

2. PERMIT SUMMARY

- a. Terms and conditions - This permitting action is carrying forward all the terms and conditions of the September 15, 2009 permit except that this permit is:
1. Eliminating Special Condition C, *Disinfection*, from the permit as the Department has reconsidered the need for said condition.
 2. Eliminating Special Condition K, Treatment System Repairs and Maintenance as the terms and conditions in the condition have been satisfied.
 3. Establishing a requirement to maintain a minimum of 85% removal for biochemical oxygen demand (BOD) and total suspended solids (TSS) pursuant to 06-096 CMR, Chapter 525, §3, sub-§III.
 4. Reducing the monitoring frequency for settleable solids from 1/Month to 1/Year as test results submitted to date indicate settleable solids have never been detected in the effluent.
- b. History – Substantive regulatory actions include the following:

December 10, 1986 –Maine Department of Environmental Protection (MDEP) Site Location Order #L-013160-87/03-A-N approved *Phase I* redevelopment of 193.4 acre Fort McKinley. Of the 44 buildings slated for redevelopment, 34 were to be renovated as 134 housing units, five as commercial uses, two as recreational, and one as maintenance/public safety. Of the 34 buildings, only the Barrack, the Hospital, Units 83F-690-69 and 83F-700-70 have not been rehabilitated to date.

May 17, 1989 - The EPA issued NPDES permit #ME0023248 to McKinley Partners. The permit expired on May 17, 1994.

June 2, 1994 – The Department issued Maine Waste Discharge License #W006931-5C-D-R for a ten-year term. The WDL authorized the discharge of up to 40,000 gpd (as a daily maximum) of secondary treated wastewater.

2. PERMIT SUMMARY (cont'd)

October 14, 2005 – The Department issued Maine Waste Discharge License (WDL) #W006931-5C-D-R jointly to McKinley Partners and the Diamond Cove Homeowners Association for a five-year term. WDL #W006931-5C-D-R authorized the year-round discharge of no more than 35,000 gpd (monthly average) of secondary-treated wastewater to Casco Bay. The change recognized that extreme precipitation and snowmelt events were creating violations of the 40,000-gpd daily maximum discharge limit.

September 15, 2009 – The Department issued combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0023248/WDL W006931-5C-F-R for a five-year term.

October 21, 2011 – The Department issued minor revision MEPDES permit #ME0023248/WDL W006931-5C-G-M, modifying a schedule of compliance date in Special Condition K, *Treatment System Repairs and Maintenance*, of the September 15, 2009, permit.

September 12, 2012 - The Department issued minor revision MEPDES permit #ME0023248/WDL W006931-5C-H-M, modifying a schedule of compliance date in Special Condition K, *Treatment System Repairs and Maintenance*, and language in Special Condition E, *Unauthorized Discharges*, of the September 15, 2009, permit.

September 2, 2014 – Diamond Cove Homeowners Association submitted a timely and complete application to the Department to renew the MEPDES permit/WDL last issued for renewal on September 15, 2009. The application was deemed complete for processing on the same date.

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 Casco Bay at the point of discharge as a Class SC waterway. Maine law, 38 M.R.S.A., Section 465-B(3) states Class SC waters shall be suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and restricted harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation and navigation and as habitat for fish and other estuarine and marine life. Discharges to Class SC waters may cause some changes to estuarine and marine life provided that the receiving waters are of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community.

5. RECEIVING WATER QUALITY CONDITIONS

The 2012 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, places Western Casco Bay and the Islands from Cape Elizabeth to Falmouth (DMR Area 13) in a category entitled, *Category 4-A: Estuarine and Marine Waters with Impaired Use, TMDL Completed*. The 305b Report indicates 12,828 acres in Area 13 are being impacted by elevated levels of fecal coliform bacteria. The report indicates a total maximum daily load (TMDL) has been completed but there is insufficient new data to determine if attainment has been achieved as bacteria may impair either recreational uses (swimming) or shellfish consumption uses or both.

Given the permittee's excellent compliance record for fecal coliform bacteria, the Department is making the determination the discharge is not causing or contributing to the potential non-attainment of water quality standards.

The 2012 305b report also lists all estuarine and marine waters is *in Category 5-D: Estuarine and Marine Waters Impaired by Legacy Pollutants* as these waters capable of supporting American Lobster are listed in Category 5-D for shellfish consumption due to elevated levels of PCBs and other persistent, bio-accumulating substances such as mercury in tomalley.

Maine law 38 M.R.S.A., §420 and Department Rule, Chapter 519, *Interim Effluent Limitations and Controls For the Discharge of Mercury*, establishes controls of mercury to surface waters of the State and United States through interim effluent limitations and implementation of pollution prevention plans. 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:

5. RECEIVING WATER QUALITY CONDITIONS (cont'd)

“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...”

Maine law 38 M.R.S.A., §420 1-B,(B)(1) states that a facility is not in violation of the AWQC for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to Section 413, subsection 11. The Department is not aware of any information nor does the Department have reason to believe that the treated discharges from the permittee’s facility contains mercury that causes or contributes to the impairment.

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 06-096 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.

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

- (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.

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

- (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, unless it is demonstrated to the Department's satisfaction that no alternative to the discharge exists.
- (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 permittee has documented that the existing treatment constitutes BPT. A Licensed Site Evaluator/P.E. had previously determined that there is not a subsurface option for Phase I development because of insufficient area to install subsurface systems to serve the entire facility. Because the Barracks and Hospital had changed hands in 2007, an additional site evaluation was conducted in 2008 and 2009 to look at alternatives to connection to the OBD. The Inn's LSE /PE determined that there is a subsurface option for the Hospital, but not for the Barracks. The LSE/PE also evaluated whether there were sufficient areas of suitable soil to site a subsurface wastewater disposal system proximate to the Hospital or existing treatment works.

The area proximate to the Hospital contains a suitable area for the treatment of less than 2,000 gpd of wastewater; less than half that required to serve the development of the Barracks. The area proximate to the treatment facility lacked any suitable soils. Therefore, pursuant to Maine law, 38 M.R.S.A. §413.3 the Barracks may continue to use the OBD after redevelopment, provided the discharge does not cause or contribute to exceedences of the 35,000 gpd (monthly average) discharge volume limit. The treatment works lacks sufficient capacity for wastewater from the future development of both the Barracks and the Hospital, collectively. Therefore, the discharge from the redevelopment of the Barracks is being permitted for another five-year term.

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

- b. Flow: The previous permitting action established a monthly average discharge flow limitation of 35,000 gallons per day (gpd) based on the design flow for the treatment system and established a continuous monitoring frequency on a year-round basis. A review of the monthly average discharge flow data as reported on the Discharge Monitoring Reports (DMRs) submitted to the Department for the period January 2011 – September 2014 indicates the following;

Flow (DMRs = 45)

Value	Limit (gpd)	Range (gpd)	Mean (gpd)
Monthly average	35,000	2,572 – 18,740	10,190
Daily maximum	Report	3,647 – 81,440	33,960

This permitting action is carrying forward the monthly average discharge flow limit of 35,000 gpd and the year-round requirement to continuously monitor the flow.

- b. Dilution Factors - 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, §D(3)(b) states that 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 or CORMIX. Using plan and profile information provided by the permittee and an average of both MERGE and CORMIX model runs, the Department has determined the dilution factors for the discharge of 0.035 MGD from the wastewater treatment facility to be as follows:

Acute = 87:1 Chronic = 1,276:1 Harmonic mean ⁽¹⁾ = 3,828:1

Footnote:

(1) 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.

- c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): 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.

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

The previous permitting action 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...." Therefore, this permitting action is carrying forward the monthly average, weekly average and daily maximum BOD₅ and TSS mass limitations based on calculations using the design flow for the facility of 35,000 gpd (0.035 MGD) and the applicable concentration limits as follows:

Monthly Average Limit: $(30 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.035 \text{ MGD}) = 9 \text{ lbs/day}$

Weekly Average Limit: $(45 \text{ mg/L})(8.34 \text{ lbs./day})(0.035 \text{ MGD}) = 13 \text{ lbs/day}$

Daily Maximum Limit: $(50 \text{ mg/L})(8.34 \text{ lbs./day})(0.035 \text{ MGD}) = 15 \text{ lbs/day}$

This permitting action is establishing 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.

For BOD₅, a review of the monthly average effluent concentration data as reported on the DMRs submitted to the Department for the period January 2011 – September 2014 indicates the values have been reported as follows:

BOD concentration (DMRs = 45)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	<1 - 13	1.1
Daily Maximum	50	<1 - 13	1.1

TSS concentration(DMRs = 45)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	<1 – 8	1.6
Daily Maximum	50	<1 - 8	1.6

BOD Mass(DMRs = 45)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	9	0.02 – 0.8	0.2
Daily Maximum	15	0.02 – 0.8	0.2

TSS Mass(DMRs = 45)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	9	0.02 – 0.9	0.3
Daily Maximum	15	0.02 – 0.9	0.3

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

- d. Settleable Solids: The previous permitting action established a Department BPT based daily maximum concentration limit of 0.3 ml/L. This permit is reducing the monitoring frequency for settleable solids from 1/Month to 1/Year as test results submitted to date indicate settleable solids have never been detected in the effluent.
- e. Fecal coliform bacteria: The previous permit established seasonal (May 15 – September 30) monthly average and daily maximum fecal coliform bacteria limits of 15 colonies/100 mL and 50 colonies/100 mL, respectively, based on the Water Classification Program criteria for the Class SB waterways and are consistent with the National Shellfish Sanitation Program.

A review of the monthly average and daily maximum data as reported on the DMRs submitted to the Department for the period May 2011 – September 2014 indicates the monthly (geometric mean) and daily maximum fecal coliform bacteria discharged as follows:

Fecal coliform bacteria (DMRs=20)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	<1 - 150	8
Daily Maximum	50	<1 - 592	30

- f. Total Residual Chlorine (TRC): The previous permitting action established a BPT based concentration limit of 1.0 mg/L for TRC with a monitoring frequency of 5/Week that are being carried forward in this permitting action. Limitations on TRC are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. Department permitting actions impose the more stringent of either a water quality-based or BPT-based limit. With dilution factors calculated in Section 6(b) of this Fact Sheet, end-of-pipe (EOP) water quality-based concentration thresholds for TRC may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated	
			Acute Limit	Chronic Limit
0.013 mg/L	0.0075 mg/L	87:1 (A) 1276:1 (C)	1.1 mg/L	9.7 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that need to dechlorinate the discharge in order to meet water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively unless the water quality based thresholds calculated are lower than the BPT limits. The permittee’s facility does not need to dechlorinate the effluent prior to discharge in order to consistently achieve compliance with the calculated acute water quality-based threshold. Therefore, this

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

permitting action is carrying forward a daily maximum technology based concentration limit of 1.0 mg/L from the previous permitting action that is applicable on a year-round basis as chlorine is toxic year-round and not seasonally.

A review of the daily maximum data as reported on the DMRs submitted to the Department for the period May 2011 – September 2014 indicates the maximum TRC discharged has been as follows;

Total residual chlorine (DMRs=25)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	1.0	0.49 – 0.93	0.80

- g. **pH:** The previous permitting action established a technology based pH range limit of 6.0 – 9.0 standard units (SU), pursuant to Department rule found at 06-096 CMR Chapter 525(3)(III)(c). The permit established a monitoring frequency of 1/Week. A review of the monthly DMR data for the period December 2011 – June 2014 indicates the following:

pH (DMRs = 45)

Value	Limit (su)	Minimum (su)	Maximum (su)
Range	6.0 – 9.0	6.0	7.4

- h. **Whole Effluent Toxicity (WET), Priority Pollutant, and Analytical Chemistry Testing:** Maine law, 38 M.R.S.A., §414-A and §420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department rule, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program* (toxics rule) sets forth effluent monitoring requirements and procedures to establish safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected and narrative and numeric water quality criteria are met. Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, sets forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

Chapter 530 Section (2)(A) specifies the dischargers subject to the rule as, “...all licensed dischargers of industrial process wastewater or domestic wastes discharging to surface waters of the State must meet the testing requirements of this section. Dischargers of other types of wastewater are subject to this subsection when and if the Department determines that toxicity of effluents may have reasonable potential to cause or contribute to exceedences of narrative or numerical water quality criteria.”

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

Chapter 530 Section 2.A specifies the criteria for exemption of certain discharges from toxics testing as follows:

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

The permittee's facility is exempt from the Chapter 530 requirements as it permitted to discharge less than 50,000 gpd, the chronic dilution factor is greater than 50:1 and the waste water has domestic-like characteristics. However, should there be a substantial change in the characteristics of the discharge in the future, the Department may reopen this permit pursuant to Special Condition I, *Reopening of Permit for Modifications*, to incorporate the applicable whole effluent toxicity (WET), priority pollutant or analytical testing requirements cited above.

- j. Nitrogen - The permittee has not been conducting total nitrogen testing on its discharge to date. However, the USEPA requested the Department evaluate the reasonable potential for the discharge of total nitrogen to cause or contribute to non-attainment of applicable water quality standards in marine waters, namely dissolved oxygen (DO) deficiencies and cultural eutrophication caused by algal blooms or impacts to eelgrass beds. The Department has 50 total nitrogen data results with an arithmetic mean of 14.3 mg/L collected on effluent from five municipally-owned treatment works and one industrial facility that discharge to Casco Bay. None of the facilities are specifically designed to remove total nitrogen. For the MEPDES permitting program, the Department considers 14.3 mg/L be representative of total nitrogen discharge levels for all facilities discharging to marine waters in the absence of facility specific data.

As of the date of this permitting action, the State of Maine has not promulgated numeric ambient water quality criteria for any of the nitrogen compounds. According to several studies in EPA's Region I, numeric nutrient criteria have been established for relatively few estuaries but the criteria that have been set typically fall between 0.35 mg N/L and 0.50 mg N/L to protect aquatic life in marine waters using dissolved oxygen as the indicator and to control cultural eutrophication effects namely diurnal DO swings and supersaturated DO levels. While the thresholds are site-specific many of the nitrogen thresholds set for the protection of eelgrass habitat are similar and fall between 0.30 mg N/L and 0.39 mg N/L.

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

Extrapolating estuarine criteria to an exposed coastal marine environment may result in thresholds that are not appropriate given the lower ambient nutrient concentrations expected in the open ocean. Based on studies in EPA Region I and the Department's best professional judgment of thresholds that are protective of Maine water quality standards, the Department is utilizing a threshold of 0.45 mg/L for the protection of aquatic life in marine waters using dissolved oxygen as the indicator and 0.32 mg/L for the protection of eelgrass beds in the vicinity of discharge outfalls. There are eelgrass beds present in the vicinity of the permittees outfall pipe and along the shores of Great Diamond Island.

Because nitrogen is not acutely toxic, the Department is considering a far-field dilution to be more appropriate when evaluating impacts of total nitrogen to a marine environment. The permittee's facility has a chronic near field dilution factor of 1,276:1. Far field dilutions are significantly higher than the near-field dilution, ranging from 100 – 10,000 times higher depending on the location of the outfall pipe. With outfalls located in protected coves or small embayments without significant flushing, the far field dilutions factors would tend to be on the order of 100 times higher. With open ocean discharges, far field dilutions would tend to be 1,000 – 10,000 times higher. The discharge from the permittee's facility is considered an embayment setting as it discharges to Casco Bay thus, the far field dilution would likely be on 100 times higher. Using the most protective far field dilution multiplier of 100 times, the near field dilution factor results in the far-field dilution factor of 127,600:1. By this analysis, the increase in the ambient total nitrogen due to permittee's effluent discharge is as follows:

Total nitrogen concentrations in effluent = 14.3 mg/L
Chronic dilution factor = 127,600:1

In-stream concentration after dilution: $\frac{14.3 \text{ mg/L}}{127,600} = 0.0001 \text{ mg/L}$

The Department has been collecting ambient total nitrogen data in close proximity to the Maine coastline to support an effort to develop statewide nutrient criteria for marine waters. For the permittee's facility, the Department calculated a mean background concentration of 0.29 mg/l based on ambient data collected in Casco Bay. As a result, after reasonable opportunity for far field mixing, the increase in the concentration of total nitrogen in the receiving water due to the discharge from the permittee's facility will not be measureable thus, the instream concentration of total nitrogen will remain at 0.29 mg/L. This concentration is lower than the Department's and EPA's best professional judgment of a critical threshold of 0.32 mg/L to protect eelgrass beds in the vicinity of the permittee's outfall pipe. Therefore, the Department is making a best professional judgment determination that the discharge of total nitrogen from the permittee's facility does not exhibit a reasonable potential to exceed applicable water quality standards for Class SC waters.

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

In order to obtain more accurate effluent total nitrogen data for the permittee's facility to assess the potential impact (or lack thereof) of the discharge, the Department will be requesting in writing, that the permittee conduct effluent monitoring (outside of this permit) for nitrate, nitrite, and total kjeldahl nitrogen at a frequency of once per month from May 1st through October 31st during calendar year 2015. Once the testing is completed, the Department will again evaluate the discharge's reasonable potential exceed applicable water quality standards, the necessity to establish water quality based limits and the appropriate monitoring requirements for the remainder of the term of the permit.

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 will be made in the Portland Press Herald newspaper on or about November 26, 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:

Gregg Wood
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7693
e-mail: gregg.wood@maine.gov

10. RESPONSE TO COMMENTS

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