



STATE OF MAINE
Department of Environmental Protection

John Elias Baldacci
GOVERNOR

David P. Littell
COMMISSIONER

August 2, 2010

Mr. Chris Higgins
Boothbay Harbor Sewer District
P.O. Box 531
Boothbay Harbor, ME 04538

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100064
Maine Waste Discharge License (WDL) Application #W002750-6C-F-R
Final Permit

Dear Chris:

Enclosed please find a copy of your **final** Maine MEPDES/WDL which was approved by the Department of Environmental Protection. Please read the permit and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding this matter, please feel free to call me at 287-7658.

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. Denise Behr, DEP/CMRO
Sandy Mojica, USEPA



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

DEPARTMENT ORDER

IN THE MATTER OF

BOOTHBAY HARBOR SEWER DISTRICT)	MAINE POLLUTANT DISCHARGE
BOOTHBAY HARBOR,)	ELIMINATION SYSTEM PERMIT
LINCOLN COUNTY, MAINE)	
PUBLICLY OWNED TREATMENT WORKS)	AND
ME0100064)	WASTE DISCHARGE LICENSE
W002750-6C-F-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 BOOTHBAY HARBOR SEWER DISTRICT, (District/permittee hereinafter) with its supportive data, agency review comments, and other related materials on file, and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The District has submitted a timely and complete application to the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100064/ Maine Waste Discharge License (WDL) #W002750-5L-E-R, (permit hereinafter) which was issued by the Department on December 13, 2005 and is due to expire on December 13, 2010. The 12/13/05 permit approved the monthly average discharge of 0.64 million gallons per day (MGD) of secondary treated waste waters from a municipally owned waste water treatment facility to the tidal waters of Boothbay Harbor, Class SB, in Boothbay Harbor, Maine.

PERMIT SUMMARY

This permit carries forward all the terms and conditions of the 12/13/05 permit except that this permit increases the quantity of transported waste received and treated at the facility from 5,000 gallons per day (gpd) to 6,400 gpd.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated June 4, 2010, 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., Section 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. The standards of classification of the receiving water body are met or, 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. The discharge will be subject to effluent limitations that require application of best practicable treatment.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the above noted application of the BOOTHBAY HARBOR SEWER DISTRICT to discharge a monthly average of 0.64 million gallons per day (MGD) of secondary treated municipal waste waters to the waters of the Boothbay Harbor, Class SB, 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 becomes effective upon the date of signature and expires at midnight five (5) years thereafter.

PLEASE NOTE ATTACHED FACT SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: April 26, 2010.
Date of application acceptance: April 26, 2010.

This order prepared by Gregg Wood, BUREAU OF LAND AND WATER QUALITY
ME0100064 2010 7/25/1

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- Beginning the effective date of the permit, the permittee is authorized to discharge secondary treated waste waters from **Outfall #001**, to the tidal waters of Boothbay Harbor. Such discharges shall be limited and monitored by the permittee as specified below:

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, MGD <i>[500501]</i>	0.64 MGD <i>[03]</i>	---	Report MGD <i>[03]</i>	---	---	---	Continuous <i>[99/99]</i>	Recorder <i>[RC]</i>
BOD ₅ <i>[00310]</i>	160 #/Day <i>[26]</i>	240 #/Day <i>[26]</i>	267 #/Day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Week <i>[01/07]</i>	Composite <i>[24]</i>
BOD ₅ % Removal ⁽¹⁾ <i>[81010]</i>	---	---	---	85 % <i>[23]</i>	---	---	1/Month <i>[01/30]</i>	Calculate <i>[CA]</i>
TSS <i>[00530]</i>	160 #/Day <i>[26]</i>	240 #/Day <i>[26]</i>	267 #/Day <i>[26]</i>	30 mg/L <i>[19]</i>	45 mg/L <i>[19]</i>	50 mg/L <i>[19]</i>	1/Week <i>[01/07]</i>	Composite <i>[24]</i>
TSS % Removal ⁽¹⁾ <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/Week <i>[01/07]</i>	Grab <i>[GR]</i>
Fecal Coliform ⁽²⁾ <i>[319616]</i> (May 15 – September 30)	---	---	---	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>	---	---	---	0.1 mg/L <i>[19]</i>	---	0.2 mg/L <i>[19]</i>	1/Day <i>[01/01]</i>	Grab <i>[GR]</i>
pH (Standard Units) <i>[00400]</i>	---	---	---	---	---	6.0-9.0 <i>[12]</i>	1/Day <i>[01/01]</i>	Grab <i>[GR]</i>

The italicized numeric values in brackets in the tables above and the tables that follow are not limitations but codes used by Department personnel to code monthly Discharge Monitoring Reports (DMR's).

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Beginning 12 months prior to the expiration date of this permit and lasting through permit expiration and every five years thereafter.

SCREENING LEVEL TESTING

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Whole Effluent Toxicity ⁽⁵⁾ <u>Acute – NOEL</u> <i>Mysidopsis bahia</i> [TDM3E] (Mysid Shrimp)	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
<u>Chronic – NOEL</u> <i>Arbacia punctulata</i> [TBH3A] (Sea urchin)	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Priority pollutant ⁽⁶⁾ [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]
Analytical chemistry ⁽⁷⁾ [51477]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]

SPECIAL CONDITIONS

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

Footnotes:

Sampling Locations:

Influent sampling for BOD₅ and TSS shall be sampled in the influent wetwell.

Effluent sampling- All effluent monitoring, with the exception of total residual chlorine, shall be conducted before the effluent bell (after the chlorination but before dechlorination) and is considered to be representative of end-of-pipe effluent characteristics.

Any change in sampling location(s) must be reviewed and approved by the Department in writing.

Sampling - 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 sent to another POTW licensed pursuant to *Waste discharge licenses*, 38 M.R.S.A. § 413 or laboratory facilities that analyze compliance samples in-house are subject to the provisions and restrictions of *Maine Comprehensive and Limited Environmental Laboratory Certification Rules*, 10-144 CMR 263 (last amended 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. See **Attachment A** of this permit for a list of the Department's RLs. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the detection limit achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL is not acceptable and will be rejected by the Department. For mass, if the analytical result is reported as <Y or if a detectable result is less than a RL, report a <X lbs/day, where X is the parameter specific limitation established in the permit.

1. **Percent Removal** – The treatment facility shall maintain a minimum of 85 percent removal of both biochemical oxygen demand and total suspended solids for all flows receiving secondary treatment. The percent removal shall be calculated based on influent and effluent concentration values. The percent removal shall be waived when the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the facility shall report "NODI-9" for this parameter on the monthly Discharge Monitoring Report (DMR).

SPECIAL CONDITIONS

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

Footnotes:

2. **Fecal coliform bacteria** - Limits are seasonal and apply between May 15th and September 30th inclusively of each year. The Department reserves the right to require year-round disinfection to protect the health, safety and welfare of the public.
3. **Fecal coliform bacteria** – The monthly average limitation is a geometric mean limitation and values shall be calculated and reported as such.
4. **Total Residual Chlorine** – 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 limitations in this permit.
5. **Whole Effluent Toxicity (WET) Testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic water quality thresholds of 6.7% and 0.8%, respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points.

Screening level testing - Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter, the permittee shall conduct screening level WET testing at a minimum frequency of once per year (1/Year). Acute tests shall be conducted on the mysid shrimp (Mysidopsis bahia) and chronic tests shall be conducted on the sea urchin (Arbacia punctulata).

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following U.S.E.P.A. methods manuals:

- a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Marine and Estuarine Organisms, Third Edition, October 2002, EPA-821-R-02-014.
- b. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

See **Attachment B** of this permit for the Department's WET report form.

SPECIAL CONDITIONS

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

Footnotes:

The permittee is also required to analyze the effluent for the nine (9) parameters specified in the WET chemistry section, and the twelve (12) parameters specified in the analytical chemistry section of the form in **Attachment A** of this permit each time a WET test is performed.

5. **Priority pollutant testing** – Priority pollutants are those parameters listed in Attachment A of this permit.

Screening level testing - Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter, the permittee shall conduct screening level priority pollutant testing at a minimum frequency of once per year (1/Year). It is noted Chapter 530 does not require routine surveillance level priority pollutant testing in the first four years of the term of this permit.

7. **Analytical chemistry** – Refers to a suite of twelve (12) chemical tests that consist of ammonia nitrogen (as N), total aluminum, total arsenic, total cadmium, total chromium, total copper, total cyanide (amenable to chlorination), total lead, total nickel, total silver, total zinc and total residual chlorine.

Screening level testing – Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter, the permittee shall conduct screening level analytical chemistry testing at a minimum frequency of once per calendar quarter (1/Quarter).

Analytical chemistry and priority pollutant testing shall be conducted on samples collected at the same time as those collected for whole effluent toxicity tests when applicable. Priority pollutant and analytical chemistry testing shall be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department. See **Attachment A** of this permit for a list of the Department's reporting levels (RLs) of detection.

Priority pollutant and analytical chemistry test results must be submitted to the Department not later than the next DMR required by the permit provided, however, that the permittee may review the toxicity reports for up to 10 business days after receiving the test results from the laboratory before submitting them. The permittee shall evaluate test results being submitted and identify to the Department, possible exceedences of the acute, chronic or human health AWQC as established in Department rule Chapter 584. For the purposes of Discharge Monitoring Report (DMR) reporting, enter a "1" for yes, testing done this monitoring period or "NODI-9" monitoring not required this period.

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 by 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 by the classification of the receiving waters.
3. The discharge shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsafe for the designated uses and characteristics ascribed to their classification.
4. 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 **Grade III** 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. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the waste water collection and treatment system by a non-domestic source (user) shall not pass through or interfere with the operation of the treatment system.

E. UNAUTHORIZED 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 April 26, 2010; 2) the terms and conditions of this permit; and 3) only from Outfall #001. 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.

SPECIAL CONDITIONS

F. NOTIFICATION REQUIREMENT

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

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and
2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system.
3. For the purposes of this section, adequate notice shall include information on:
 - a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and
 - b. Any anticipated impact of the change in the quality or quantity of the waste water to be discharged from the treatment system.

G. PUMP STATION EMERGENCY BYPASSES

Discharges from emergency bypass structures in pump stations are not authorized by this permit. The permittee shall monitor the pump stations listed below in accordance with an approved monitoring plan to determine the frequency and quantity (via measurement or estimation) of wastewater discharged from the bypass structures. **On or before September 30, 2010, (PCS Code 22099)** the permittee shall submit an update monitoring plan to the Department for review and approval. Discharges from the following pump stations shall be reported in accordance with Standard Condition B(5), *Bypasses*, and Special Condition E, *Unauthorized Discharges*, of this permit.

<u>Outfall #</u>	<u>Location</u>	<u>Receiving Water & Classification</u>
002	Pump Station #1, Union St.	Boothbay Harbor, Class SB
003	Pump Station #3, Mill Cove (Western Ave. /Mill Cove)	Boothbay Harbor, Class SB
004	Pump Station #2, Atlantic Ave.	Boothbay Harbor, Class SB
005	Pump Station #5, Townsend Ave/Meadow Rd.	Mill Creek, Class SB
006	Manhole, Off Western Ave.	Boothbay Harbor, Class SB
007	Pump Station, DMR, McKown Pt.	Boothbay Harbor, Class SB

SPECIAL CONDITIONS

H. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff shall maintain a current written Wet Weather Flow Management Plan to direct the staff on how to operate the facility effectively during periods of high flow. The Department acknowledges that the existing collection system may deliver flows in excess of the monthly average design capacity of the treatment plant during periods of high infiltration and rainfall.

The plan shall conform to Department guidelines for such plans and shall include operating procedures for a range of intensities, address solids handling procedures (including septic waste and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

The permittee shall review their plan annually and record any necessary changes to keep the plan up to date.

I. OPERATION & MAINTENANCE (O&M) PLAN

The permittee shall maintain 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 other regulatory personnel upon request.

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

J. MERCURY

All mercury sampling (4/Year) required by this permit or required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See **Attachment C, Effluent Mercury Test Report**, of this permit for the Department's form for reporting mercury test results.

SPECIAL CONDITIONS

K. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

During the effective period of this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream up to **a daily maximum of 6,400 gallons per day** of transported wastes, subject to the following terms and conditions.

1. "Transported wastes" means any liquid non-hazardous waste delivered to a wastewater treatment facility by a truck or other similar conveyance that has different chemical constituents or a greater strength than the influent described on the facility's application for a waste discharge license. Such wastes may include, but are not limited to septage, industrial wastes or other wastes to which chemicals in quantities potentially harmful to the treatment facility or receiving water have been added.
2. The character and handling of all transported wastes received must be consistent with the information and management plans provided in application materials submitted to the Department.
3. At no time shall the addition of transported wastes cause or contribute to effluent quality violations. Transported wastes may not cause an upset of or pass through the treatment process or have any adverse impact on the sludge disposal practices of the wastewater treatment facility.

Wastes that contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation must be refused. Odors and traffic from the handling of transported wastes may not result in adverse impacts to the surrounding community. If any adverse effects exist, the receipt or introduction of transported wastes into the treatment process or solids handling stream shall be suspended until there is no further risk of adverse effects.

4. The permittee shall maintain records for each load of transported wastes in a daily log which shall include at a minimum the following.
 - (a) The date;
 - (b) The volume of transported wastes received;
 - (b) The source of the transported wastes;
 - (d) The person transporting the transported wastes;
 - (e) The results of inspections or testing conducted;
 - (f) The volumes of transported wastes added to each treatment stream; and
 - (g) The information in (a) through (d) for any transported wastes refused for acceptance.

These records shall be maintained at the treatment facility for a minimum of five years.

SPECIAL CONDITIONS

K. DISPOSAL OF TRANSPORTED WASTES IN WASTEWATER TREATMENT FACILITY

5. The addition of transported wastes into the treatment process or solids handling stream shall not cause the treatment facility's design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of transported wastes into the treatment process or solids handling stream shall be reduced or terminated in order to eliminate the overload condition.
6. Holding tank wastewater from domestic sources to which no chemicals in quantities potentially harmful to the treatment process have been added shall not be recorded as transported wastes but should be reported in the treatment facility's influent flow.
7. During wet weather events, transported wastes may be added to the treatment process or solids handling facilities only in accordance with a current Wet Weather Flow Management Plan approved by the Department that provides for full treatment of transported wastes without adverse impacts.
8. In consultation with the Department, chemical analysis is required prior to receiving transported wastes from new sources that are not of the same nature as wastes previously received. The analysis must be specific to the type of source and designed to identify concentrations of pollutants that may pass through, upset or otherwise interfere with the facility's operation.
9. Access to transported waste receiving facilities may be permitted only during the times specified in the application materials and under the control and supervision of the person responsible for the wastewater treatment facility or his/her designated representative.
10. The authorization is subject to annual review and, with notice to the permittee and other interested parties of record, may be suspended or reduced by the Department as necessary to ensure full compliance with Chapter 555 of the Department's rules and the terms and conditions of this permit.

L. 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

M. CHAPTER 530(2)(D)(4) CERTIFICATION

On or before December 31 of each year [*PCS code 959799*] the permittee is required to file a statement with the Department describing the following.

1. Increases in the number, types and flows of industrial, commercial or domestic discharges to the facility that in the judgment of the Department may cause the receiving water to become toxic.
2. Changes in the condition or operations of the facility that may increase the toxicity of the discharge.
3. Changes in storm water collection or inflow/infiltration affecting the facility that may increase the toxicity of the discharge.
4. Increases in the type or volume of hauled wastes accepted by the facility.
5. The Department reserves the right to reinstate annual (surveillance level) testing or other toxicity testing if new information becomes available that indicates the discharge may cause or have a reasonable potential to cause exceedences of ambient water quality criteria/thresholds.

N. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and shall be postmarked by the thirteenth (13th) day of the month or hand-delivered to a Department Regional Office such that the DMRs are received by the Department by 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, unless otherwise specified, to the Department's facility inspector at:

Department of Environmental Protection
Central Maine Regional Office
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333

SPECIAL CONDITIONS

N. MONITORING AND REPORTING (cont'd)

Alternatively, if you are 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.

O. 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.

ATTACHMENT A

**Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form**

This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

Facility Name _____ MEPDES # _____ Facility Representative Signature _____
 Pipe # _____ To the best of my knowledge this information is true, accurate and complete.

Licensed Flow (MGD)
 Acute dilution factor
 Chronic dilution factor
 Human health dilution factor
 Criteria type: M(arine) or F(resh)

Flow for Day (MGD)⁽¹⁾ Flow Avg. for Month (MGD)⁽²⁾
 Date Sample Collected Date Sample Analyzed

Laboratory _____ Telephone _____
 Address _____
 Lab Contact _____ Lab ID # _____

ERROR WARNING ! Essential facility information is missing. Please check required entries in bold above.

MARINE AND ESTUARY VERSION

Please see the footnotes on the last page.

WHOLE EFFLUENT TOXICITY		Effluent Limits, %			Receiving Water or Ambient	Effluent Concentration (ug/L or as noted)	WET Result, % Do not enter % sign	Reporting Limit Check	Possible Exceedence ⁽⁷⁾		
		Acute	Chronic	Acute					Chronic		
	Mysid Shrimp										
	Sea Urchin										
WET CHEMISTRY											
	pH (S.U.) ⁽⁹⁾				(8)						
	Total Organic Carbon (mg/L)				NA						
	Total Solids (mg/L)				NA						
	Total Suspended Solids (mg/L)				NA						
	Salinity (ppt.)										
ANALYTICAL CHEMISTRY ⁽³⁾											
	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L					Reporting Limit Check	Possible Exceedence ⁽⁷⁾		
			Acute ⁽⁶⁾	Chronic ⁽⁶⁾	Health ⁽⁶⁾				Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) ⁽⁹⁾	0.05				NA					
	AMMONIA	NA				(8)					
M	ALUMINUM	NA				(8)					
M	ARSENIC	5				(8)					
M	CADMIUM	1				(8)					
M	CHROMIUM	10				(8)					
M	COPPER	3				(8)					
M	CYANIDE	5				(8)					
M	LEAD	3				(8)					
M	NICKEL	5				(8)					
M	SILVER	1				(8)					
M	ZINC	5				(8)					

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form

This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

PRIORITY POLLUTANTS ⁽⁴⁾		Effluent Limits			Reporting Limit Check	Possible Exceedence ⁽⁷⁾		
	Reporting Limit	Acute ⁽⁶⁾	Chronic ⁽⁶⁾	Health ⁽⁶⁾		Acute	Chronic	Health
M	ANTIMONY	5						
M	BERYLLIUM	2						
M	MERCURY (5)	0.2						
M	SELENIUM	5						
M	THALLIUM	4						
A	2,4,6-TRICHLOROPHENOL	3						
A	2,4-DICHLOROPHENOL	5						
A	2,4-DIMETHYLPHENOL	5						
A	2,4-DINITROPHENOL	45						
A	2-CHLOROPHENOL	5						
A	2-NITROPHENOL	5						
A	4,6 DINITRO-O-CRESOL (2-Methyl-4,6-dinitrophenol)	25						
A	4-NITROPHENOL	20						
A	P-CHLORO-M-CRESOL (3-methyl-4-chlorophenol)+B80	5						
A	PENTACHLOROPHENOL	20						
A	PHENOL	5						
BN	1,2,4-TRICHLOROENZENE	5						
BN	1,2-(O)DICHLOROENZENE	5						
BN	1,2-DIPHENYLHYDRAZINE	10						
BN	1,3-(M)DICHLOROENZENE	5						
BN	1,4-(P)DICHLOROENZENE	5						
BN	2,4-DINITROTOLUENE	6						
BN	2,6-DINITROTOLUENE	5						
BN	2-CHLORONAPHTHALENE	5						
BN	3,3'-DICHLOROENZIDINE	16.5						
BN	3,4-BENZO(B)FLUORANTHENE	5						
BN	4-BROMOPHENYLPHENYL ETHER	2						
BN	4-CHLOROPHENYL PHENYL ETHER	5						
BN	ACENAPHTHENE	5						
BN	ACENAPHTHYLENE	5						
BN	ANTHRACENE	5						
BN	BENZIDINE	45						
BN	BENZO(A)ANTHRACENE	8						
BN	BENZO(A)PYRENE	3						
BN	BENZO(G,H,I)PERYLENE	5						
BN	BENZO(K)FLUORANTHENE	3						
BN	BIS(2-CHLOROETHOXY)METHANE	5						
BN	BIS(2-CHLOROETHYL)ETHER	6						
BN	BIS(2-CHLOROISOPROPYL)ETHER	6						
BN	BIS(2-ETHYLHEXYL)PHTHALATE	3						
BN	BUTYLBENZYL PHTHALATE	5						
BN	CHRYSENE	3						
BN	DI-N-BUTYL PHTHALATE	5						
BN	DI-N-OCTYL PHTHALATE	5						
BN	DIBENZO(A,H)ANTHRACENE	5						
BN	DIETHYL PHTHALATE	5						
BN	DIMETHYL PHTHALATE	5						

**Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form**

This form is for reporting laboratory data and facility information. Official compliance reviews will be done by DEP.

V	ACROLEIN	NA									
V	ACRYLONITRILE	NA									
V	BENZENE	5									
V	BROMOFORM	5									
V	CARBON TETRACHLORIDE	5									
V	CHLOROBENZENE	6									
V	CHLORODIBROMOMETHANE	3									
V	CHLOROETHANE	5									
V	CHLOROFORM	5									
V	DICHLOROBROMOMETHANE	3									
V	ETHYLBENZENE	10									
V	METHYL BROMIDE (Bromomethane)	5									
V	METHYL CHLORIDE (Chloromethane)	5									
V	METHYLENE CHLORIDE	5									
V	TETRACHLOROETHYLENE (Perchloroethylene or Tetrachloroethene)	5									
V	TOLUENE	5									
V	TRICHLOROETHYLENE (Trichloroethene)	3									
V	VINYL CHLORIDE	5									

Notes:

- (1) Flow average for day pertains to WET/PP composite sample day.
- (2) Flow average for month is for month in which WET/PP sample was taken.
- (3) Analytical chemistry parameters must be done as part of the WET test chemistry.
- (4) Priority Pollutants should be reported in micrograms per liter (ug/L).
- (5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.
- (6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% - to allow for new or changed discharges or non-point sources).
- (7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.
- (8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.
- (9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

Comments:

ATTACHMENT B

**MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
MARINE WATERS**

Facility Name _____ MEPDES Permit # _____
Pipe # _____

Facility Representative _____ Signature _____

By signing this form, I attest that to the best of my knowledge that the information provided is true, accurate, and complete.

Facility Telephone # _____ Date Collected _____ Date Tested _____
mm/dd/yy mm/dd/yy

Chlorinated? _____ Dechlorinated? _____

Results	% effluent		Effluent Limitations
	mysisd shrimp	sea urchin	
A-NOEL			A-NOEL
C-NOEL			C-NOEL

Data summary	mysisd shrimp	sea urchin	Salinity Adjustment
	% survival	% fertilized	
QC standard	>90	>70	
lab control			brine
receiving water control			sea salt
conc. 1 (%)			other
conc. 2 (%)			
conc. 3 (%)			
conc. 4 (%)			
conc. 5 (%)			
conc. 6 (%)			
stat test used			

place * next to values statistically different from controls

Reference toxicant	mysisd shrimp	sea urchin
	A-NOEL	C-NOEL
toxicant / date		
limits (mg/L)		
results (mg/L)		

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

Report WET chemistry on DEP Form "ToxSheet (Marine Version), March 2007."

ATTACHMENT C

Effluent Mercury Test Report

Name of Facility: _____

Federal Permit # ME _____

Pipe # _____

Purpose of this test: Initial limit determination

Compliance monitoring for: year _____ calendar quarter _____

Supplemental or extra test

SAMPLE COLLECTION INFORMATION

Sampling Date:

--	--	--

mm dd yy

Sampling time: _____ AM/PM

Sampling Location: _____

Weather Conditions: _____

Please describe any unusual conditions with the influent or at the facility during or preceding the time of sample collection:

Optional test - not required but recommended where possible to allow for the most meaningful evaluation of mercury results:

Suspended Solids _____ mg/L

Sample type: _____ Grab (recommended) or
_____ Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

Date of analysis: _____

Result: ng/L (PPT)

Please Enter Effluent Limits for your facility

Effluent Limits: Average = _____ ng/L

Maximum = _____ ng/L

Please attach any remarks or comments from the laboratory that may have a bearing on the results or their interpretation. If duplicate samples were taken at the same time please report the average.

CERTIFICATION

I certify that to the best of my knowledge the foregoing information is correct and representative of conditions at the time of sample collection. The sample for mercury was collected and analyzed using EPA Methods 1669 (clean sampling) and 1631 (trace level analysis) in accordance with instructions from the DEP.

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

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

FACT SHEET

Date: **June 4, 2010**

PERMIT NUMBER: **ME0100064**
LICENSE NUMBER: **W002750-6C-F-R**

NAME AND ADDRESS OF APPLICANT:

**BOOTHBAY HARBOR SEWER DISTRICT
P.O. Box 531, Sea Street
Boothbay Harbor, Maine 04538**

COUNTY: **Lincoln County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**Boothbay Harbor Sewer District
27 Sea Street
Boothbay Harbor, Maine 04538**

RECEIVING WATER/CLASSIFICATION: **Tidewaters of Boothbay Harbor/Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Chris Higgins, Supt.
(207) 633-4663
e-mail: crhiggins@gwi.net**

1. APPLICATION SUMMARY

- a. Application – The Boothbay Harbor Sewer District (District/permittee hereinafter) has submitted a timely and complete application to the Department for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100064/ Maine Waste Discharge License (WDL) #W002750-5L-E-R, (permit hereinafter) which was issued by the Department on December 13, 2005 and is due to expire on December 13, 2010. The 12/13/05 permit approved the monthly average discharge of 0.64 million gallons per day (MGD) of secondary treated waste waters from a municipally owned waste water treatment facility to the tidal waters of Boothbay Harbor, Class SB, in Boothbay Harbor, Maine. See **Attachment A** of this Fact Sheet for a location map.

1. APPLICATION SUMMARY (cont'd)

- b. Source Description: Waste water conveyed to the waste water treatment facility is generated by domestic and commercial entities within the District's boundaries. There are no industrial users nor is the facility required to implement a formal pretreatment program. The collection system is 100% separated, is approximately fifteen (15) miles in length and utilizes twenty (20) pump stations to convey flows to the treatment facility. All 20 pump stations have emergency generator receptacles and manual transfer switches such that back-up power via a portable generator can be supplied to the stations in the event of a power failure. In addition, six (6) of the 20 pump stations have on-site generators with automatic transfer switches for back-up power. There are no combined sewer overflow (CSO) outfalls associated with the collection system.
- a. Waste Water Treatment: The existing waste water treatment facility provides a secondary level of treatment via bar racks, grit removal and sequencing batch reactors. Sludge handling equipment at the facility includes, but is not limited to, an aerated biosolids holding tank and a centrifuge. Sludge is trucked and stored at a privately owned facility for mixing in the spring and is then composted in accordance with applicable rules and regulations and license/permit conditions.

The secondary treated waste water is disinfected with sodium hypochlorite in a contact tank for disinfection and dechlorinated via sodium bisulfite prior to being discharged to the receiving water via a pipe measuring 24 inches in diameter with three diffuser ports, each measuring 8 inches in diameter. The facility is authorized to introduce up to 5,000 gallons per day of septage into the waste water treatment process provided it is done so in accordance with the most recent Department approved written Septage Management Plan required by Department rule Chapter 555. Biosolids generated at the facility are digested, dewatered by a centrifuge, and composted or land spread on Department approved sites. See **Attachment B** of this Fact Sheet for a schematic of waste water treatment facility.

2. PERMIT SUMMARY

- a. Terms and Conditions - This permit carries forward all the terms and conditions of the 12/13/05 permit except that this permit increases the quantity of transported waste received and treated at the facility from 5,000 gallons per day (gpd) to 6,400 gpd.
- b. History: The most recent regulatory actions include the following:

October 5, 1998 - The U.S. Environmental Protection Agency (EPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0100064 for a five-year term.

January 19, 1994 - The Department issued WDL #W002750-46-B-R for a five-year term.

2. PERMIT SUMMARY (cont'd)

May 23, 2000 – The Department administratively modified WDL #W002750-46-B-R by establishing interim average and maximum concentration limits of 32.6 part per trillion (ppt) and 48.8 ppt respectively, for mercury.

December 8, 2000 – The Department issued Waste Discharge License #W002750-5L-C-R for a five-year term.

January 12, 2001 - The Department received authorization from the EPA to administer the NPDES permitting program in Maine. From that point forward, the program has been referred to as the MEPDES permitting program.

August 13, 2001 - The Boothbay Harbor Sewer District submitted an application to the Department to modify WDL #W002750-5L-C-R to incorporate the terms and conditions of the MEPDES program.

August 21, 2001 – The Boothbay Harbor Sewer District submitted a letter to the Department authorizing the EPA to retire NPDES permit #ME0100064, last issued by the EPA on October 5, 1998. Upon issuance of the MEPDES permit, all terms and conditions of the NPDES were null and void.

September 24, 2001 – The Department issued combination MEPDES permit #ME0100064/WDL #W002750-5L-D-M for a five-year term.

October 9, 2005 - Department rules, Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants*, became effective.

December 13, 2005 – The Department issued combination MEPDES permit #ME0100064/WDL #W002750-5L-E-R for a five-year term.

April 26, 2010 – The District submitted a timely and complete application to the Department to renew the 12/13/05 MEPDES permit.

3. CONDITIONS OF PERMITS

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 Boothbay Harbor at the point of discharge as Class SB waters. Maine Law, 38 M.R.S.A., Section 465-B(2) describes the classification standards for Class SB waters.

5. RECEIVING WATER QUALITY CONDITIONS

A document entitled, The State of Maine, Department of Environmental Protection, 2008 Integrated Water Quality Monitoring and Assessment Report (305b) report published by the Department indicates that State's Department of Marine Resources shellfish harvesting Area #22 [Boothbay and vicinity (Southport, Boothbay Hbr. Boothbay)] is closed to the harvesting of shellfish. (See **Attachment C** of this Fact Sheet). The DMR traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (instream thresholds established in the National Shellfish Sanitation Program) or keep areas closed due to lack of updated information. In addition, a small area is closed in the immediate vicinity of all waste water treatment outfall pipes in the unlikely event of a failure in the disinfection system for the treatment plant. It is noted the Boothbay Harbor area has one of the largest concentration of permitted overboard discharge systems in the State which is the primary reason for the shellfish area closures. The Department has made the determination that if the District's waste water treatment facility maintains compliance with the fecal coliform bacteria limits established in this permitting action, the facility will not cause or contribute to the closure of the shellfish harvesting area.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow - The previous permitting action established a monthly average flow limitation of 0.640 MGD and a daily maximum reporting requirement that are being carried forward in this permitting action. The monthly average limit reflects the monthly average dry weather design capacity of the existing waste water treatment facility.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2007 – February 2010 indicates the permittee has been in compliance with said limit(s) 100% of the time as values have been reported as follows:

Flow (DMRs=38)

Value	Limit (MGD)	Range (MGD)	Mean (MGD)
Monthly average	0.64	0.191 – 0.605	0.371
Daily maximum	Report	0.263 – 1.612	0.819

- b. Dilution Factors: Department Regulation Chapter 530, “*Surface Water Toxics Control Program*”, §4(A)(2)(a) 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, CORMIX or another predictive model determined by the Department to be appropriate for the site conditions.

Using plan and profile information provided by the permittee and the CORMIX model, the Department has determined the dilution factors for the discharge of 0.64 MGD from the waste water treatment facility are as follows:

$$\text{Acute} = 15:1 \qquad \text{Chronic} = 125:1 \qquad \text{Harmonic Mean} = 375:1^{(1)}$$

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 a factor of three (3).

- c. Biochemical Oxygen Demand (BOD5) & Total Suspended Solids (TSS): - The previous permitting action established monthly and weekly average BOD5 and TSS best practicable treatment (BPT) concentration limits of 30 mg/L and 45 mg/L respectively, that are based on secondary treatment requirements as defined in Department rule 06-096 CMR Chapter 525(3)(III). The maximum daily BOD5 and TSS concentration limits of 50 mg/L were based on a Department best professional judgment of BPT. All three concentration limits are being carried forward in this permitting action.

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

As for mass limitations, the previous permitting action established monthly average, weekly average and daily maximum limitations based on a monthly average limit of 0.640 MGD that are being carried forward in this permitting action. The limitations were derived as follows:

Monthly average: $(0.640 \text{ MGD})(8.34)(30 \text{ mg/L}) = 160 \text{ lbs/day}$
 Weekly average: $(0.640 \text{ MGD})(8.34)(45 \text{ mg/L}) = 240 \text{ lbs/day}$
 Daily maximum: $(0.640 \text{ MGD})(8.34)(50 \text{ mg/L}) = 267 \text{ lbs/day}$

A review of the monthly DMR data for the period January 2007 – February 2010 indicates the permittee has been in compliance with said limit(s) 99% of the time as values have been reported as follows:

BOD Mass (DMRs=38)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	160	7 – 87	35
Weekly Average	240	11 – 141	57
Daily Maximum	267	13 – 215	82

BOD Concentration (DMRs=38)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	4 – 30	12
Weekly Average	45	6 – 38	16
Daily Maximum	50	7 – 38	20

TSS mass (DMRs=38)

Value	Limit (lbs/day)	Range (lbs/day)	Average (lbs/day)
Monthly Average	160	12 – 66	28
Weekly Average	240	16 – 155	47
Daily Maximum	267	22 – 262	84

TSS concentration (DMRs=38)

Value	Limit (mg/L)	Range (mg/L)	Average (mg/L)
Monthly Average	30	5 – 21	9
Weekly Average	45	5 – 31	13
Daily Maximum	50	8 – 36	20

This permitting action carries forward the requirement for 85% removal for BOD and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3).

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

A review of the monthly DMR data for the period January 2007 – February 2010 indicates the permittee has been in compliance with said limit(s) 100% of the time as values have been reported as follows:

BOD % Removal (DMRs=38)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	91 - 98	95

TSS % Removal (DMRs=38)

Value	Limit (%)	Range (%)	Average (%)
Monthly Average	85	93 - 99	96

Monitoring frequencies for BOD and TSS of 1/Week are being carried forward from the previous permitting action and are based on Department policy for facilities with a monthly average flow limitation between 0.5 MGD and 1.0 MGD

- d. Settleable Solids: The previous permitting action established a daily maximum technology-based concentration limit of 0.3 ml/L and a minimum monitoring frequency requirement of once per day for settleable solids. This permitting action is carrying forward the technology-based daily maximum concentration limit of 0.3 ml/L as it is considered by the Department to be BPT for secondary treated sanitary waste water, and the minimum monitoring frequency requirement of once per day.

A review of the monthly DMR data for the period January 2007 – February 2010 indicates the permittee has been in compliance with said limit(s) 100% of the time as values have been reported as follows:

Settleable solids (DMRs=38)

Value	Limit (ml/L)	Range (ml/L)	Average (ml/L)
Daily Maximum	0.3	0 - <0.3	<0.1

- e. Fecal Coliform Bacteria - The previous permitting action established monthly average and daily maximum limits of 15 colonies/100 ml and 50 colonies/100 ml and are based on the Maine Water Classification Program criteria for the receiving waters (including standards in the National Shellfish Sanitation Program) and requires application of the BPT technology. The limitations are seasonal and apply from May 15th – September 30th of each year. The Department reserves the right to require year-round disinfection to protect the health and welfare of the public.

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

A review of the monthly DMR data for the period January 2007 – February 2010 indicates the permittee has been in compliance with said limit(s) 99% of the time as values have been reported as follows:

Fecal coliform bacteria (DMRs=15)

Value	Limit (col/100 ml)	Range (col/100 ml)	Mean (col/100 ml)
Monthly Average	15	2 - 13	6
Daily Maximum	50	5 - 48	19

- f. Total Residual Chlorine - The previous permitting action established a water quality based daily maximum technology based concentration limit of 0.2 mg/L and a monthly average technology based concentration limit of 0.1 mg/L. Limits on total residual chlorine (TRC) are specified to ensure that ambient water quality standards are maintained and that BPT technology is being applied to the discharge. The Department imposes the more stringent of the water quality or technology based limits in permitting actions. End-of-pipe water quality based concentration thresholds may be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Threshold	Chronic Threshold
Chlorine	0.013 mg/L	0.0075 mg/L	15:1	125:1	0.20 mg/L	0.94 mg/L

Example calculation: Acute – 0.013 mg/L (15) = 0.195 mg/L

To meet the water quality based limits calculated above, the permittee must dechlorinate the effluent prior to discharge. The Department has established a daily maximum BPT limitation of 0.3 mg/L for facilities that need to dechlorinate their effluent unless calculated water quality based limits are lower than 0.3 mg/L. In the case of the Boothbay Harbor Sewer District, the calculated acute (daily maximum) water quality based threshold of 0.20 mg/L is lower than the BPT limit of 0.3 mg/L, thus the water quality based limit of 0.20 mg/L is imposed. For the monthly average, the calculated chronic water quality based threshold of 0.94 mg/L is higher than the BPT limit of 0.1 mg/L, thus the BPT limit of 0.1 mg/L is imposed.

A review of the monthly DMR data for the period January 2007 – February 2010 indicates the permittee has been in compliance with said limit(s) 100% of the time as values have been reported as follows:

Total residual chlorine (DMRs=15)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Monthly Average	0.1	0.05 – 0.08	0.06
Daily Maximum	0.2	0.11 – 0.19	0.16

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

- h. pH Range- The previous permitting action established a BPT pH range limit from to 6.0 –9.0 standard units pursuant to Department rule found at Chapter 525(3)(III)(c). A review of the monthly DMR data for the period January 2007 – February 2010 indicates the permittee has been in compliance with said limit(s) 100% of the time.
- i. Whole Effluent Toxicity (WET) & Chemical-Specific Testing: Maine law, 38 M.R.S.A., Sections 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 Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

WET, priority pollutant and analytical chemistry testing, as required by Chapter 530, is included in this permit in order to fully characterize the effluent. This permit also provides for reconsideration of effluent limits and monitoring schedules after evaluation of toxicity testing results. The monitoring schedule includes consideration of results currently on file, the nature of the wastewater, existing treatment and receiving water characteristics.

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute and chronic WET tests are performed on invertebrate and vertebrate species. Priority pollutant and analytical chemistry testing is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria as established in Chapter 584.

Chapter 530 establishes four categories of testing requirements based predominately on the chronic dilution factor. The categories are as follows:

- 1) Level I – chronic dilution factor of <20:1.
- 2) Level II – chronic dilution factor of $\geq 20:1$ but <100:1.
- 3) Level III – chronic dilution factor $\geq 100:1$ but <500:1 or >500:1 and $Q \geq 1.0$ MGD
- 4) Level IV – chronic dilution >500:1 and $Q \leq 1.0$ MGD

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

Department rule Chapter 530 (2)(D) specifies the criteria to be used in determining the minimum monitoring frequency requirements for WET, priority pollutant and analytical chemistry testing. Based on the Chapter 530 criteria, the Boothbay Harbor facility falls into the Level III frequency category as the facility has a chronic dilution factor $\geq 100:1$ but $< 500:1$. Chapter 530(2)(D)(1) specifies that surveillance and screening level testing requirements are as follows:

Screening level testing

Level	WET Testing	Priority pollutant testing	Analytical chemistry
III	1 per year	1 per year	4 per year

Surveillance level testing

Level	WET Testing	Priority pollutant testing	Analytical chemistry
III	1 per year	None required	1 per year

Department rule Chapter 530(D)(3)(b) states dischargers in Levels III and IV may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedences.

A review of the data on file with the Department for the District indicates that to date, they have fulfilled the WET and chemical-specific testing requirements of Chapter 530.

On July 27, 2010, the Department conducted a statistical evaluation on the aforementioned WET and chemical-specific tests results in accordance with the statistical approach outlined in the Section 3.3.2 and Table 3-2 of USEPA's *Technical Support Document for Water Quality-Based Toxics Control* (USEPA Publication 505/2-90-001, March, 1991, EPA, Office of Water, Washington, D.C.). The statistical evaluation indicates the discharge from the District's waste water treatment facility does not exceed or have a reasonable potential to exceed the critical acute (6.7%) or chronic (0.8%) water quality thresholds for any of the WET species tested to date. In addition, the 6/4/10 statistical evaluation indicates the discharge does not exceed or have a reasonable potential to exceed any acute, chronic or human health AWQC for any of the chemicals tested to date. Therefore, no numeric limitations for any WET species or chemicals tested to date are being established in this permitting action.

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

As for testing frequencies Chapter 530(2)(D)(3)(b) states in part that for Level III facilities "... may be waived from conducting surveillance testing for individual WET species or chemicals provided that testing in the preceding 60 months does not indicate any reasonable potential for exceedence as calculated pursuant to section 3(E). Based on the results of the 7/27/10 statistical evaluation, the District qualified for the testing waiver. Therefore, this permit action establishes a screening level testing requirements as follows:

Level	WET Testing	Priority pollutant testing	Analytical chemistry
III	1 per year	1 per year	4 per year

It is noted however that if future WET or other chemical specific test results indicates the discharge exceeds critical water quality thresholds or AWQC, this permit will be reopened pursuant to Special Condition L, *Reopening of Permit For Modification*, of this permit to establish applicable limitations and monitoring requirements.

- j. Mercury: Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W002750-46-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 32.6 parts per trillion (ppt) and 48.8 ppt, respectively, and a minimum monitoring frequency requirement of four tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect. It is noted that the mercury effluent limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as the limits and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. The interim mercury limits remain in effect and enforceable and modifications to the limits and/or monitoring frequencies will be formalized outside of this permitting document pursuant to Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519.

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. A review of the Department’s database for the previous 60-month period indicates mercury test results reported have ranged from 1.0 ppt to 20 ppt with an arithmetic mean (n=19) of 4.8 ppt.

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

- k. Septage/Transported Wastes – The previous permitting action authorized the District to receive up to 5,000 gpd of septage. Department rule Chapter 555, *Standards For The Addition of Transported Wastes to Wastewater Treatment Facilities*, limits the quantity of septage received at a facility to 1% of the design capacity of treatment facility if the facility utilizes a side stream or storage method of introduction into the influent flow, or 0.5% of the design capacity of the facility if the facility does not utilize the side stream or storage method of introduction into the influent flow. A facility may receive more than 1% of the design capacity on a case-by-case basis. In their application for permit renewal, the District has requested the Department increase the daily quantity of transported waste it is authorized to receive and treat from 5,000 gpd to 6,400 gpd as it does utilize the side stream/storage method of metering wastes into the facility's influent flow. With a design capacity of 0.64 MGD, 6,400 gpd represents 1.0% of said capacity. The permittee has submitted an up-to-date Transported Management Plan as an exhibit to their 4/5/10 application for permit renewal.

The Department has reviewed and approved said plan and determined that under normal operating conditions, the receipt and treatment of 6,400 gpd of transported waste into the facility will not cause or contribute to upset conditions of the treatment process.

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the Boothbay Register newspaper on April 22, 2010. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or 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 should be sent to:

Gregg Wood
Bureau of Land and 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

During the period of June 5, 2010, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the BHSD's facility. The Department received one comment from the permittee, in a letter dated *July 16, 2010*, that resulted in a change in the final permit. The Department's responses to the comments are as follows:

Comment #1: The permittee requested that the Department grant an increase in the quantity of transported waste received and treated at the facility from 5,00 gallons per day (gpd) to 6,400 gpd as requested in the April 26, 2010 permit renewal application

Response #1: Failure to grant the requested increase in transported waste in the draft permit was an oversight by the Department. The final permit authorizes the BHSD to receive and treat up to 6,400 gpd of transported waste.

ATTACHMENT A

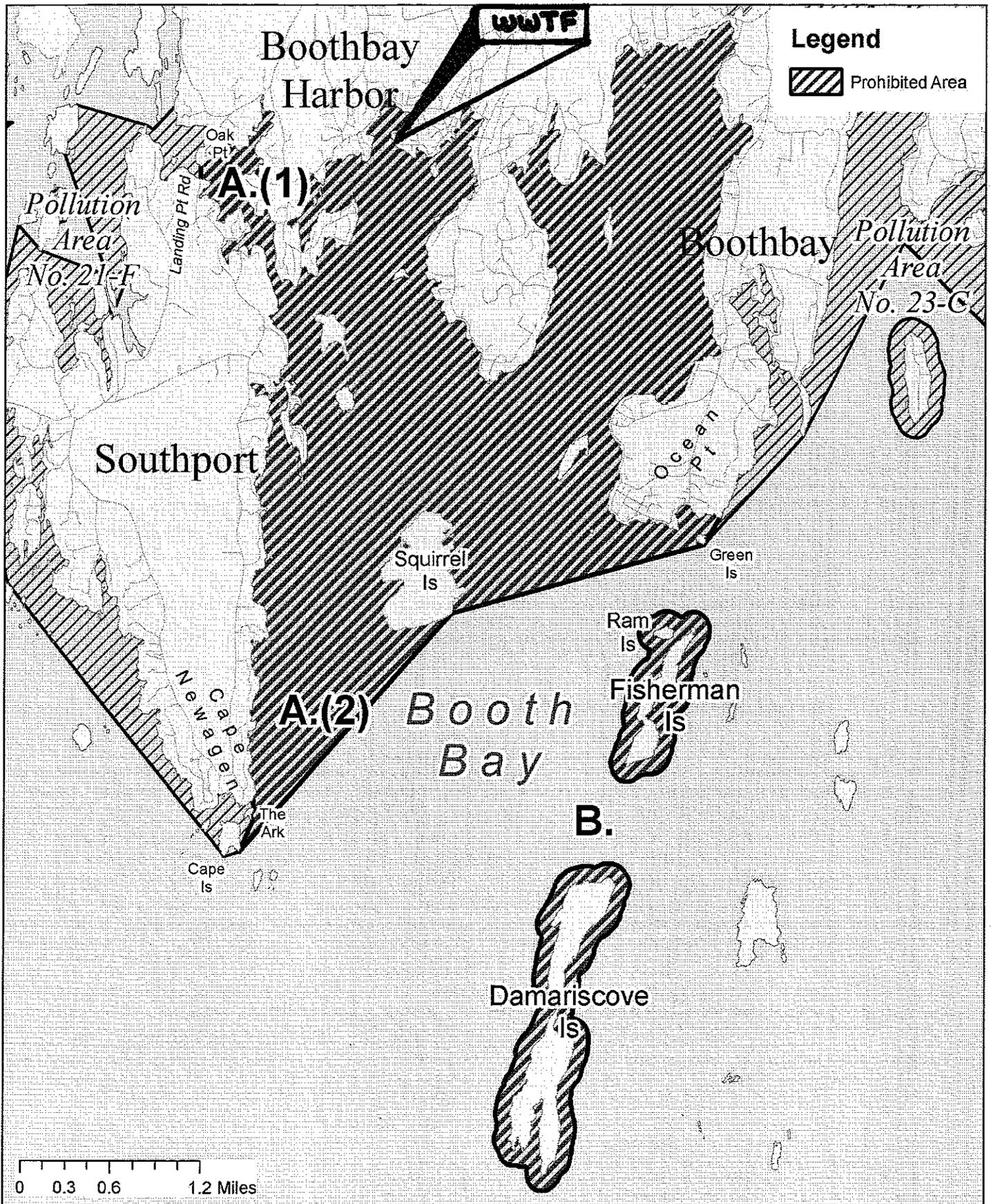


Maine Department of Marine Resources Pollution Area No. 22



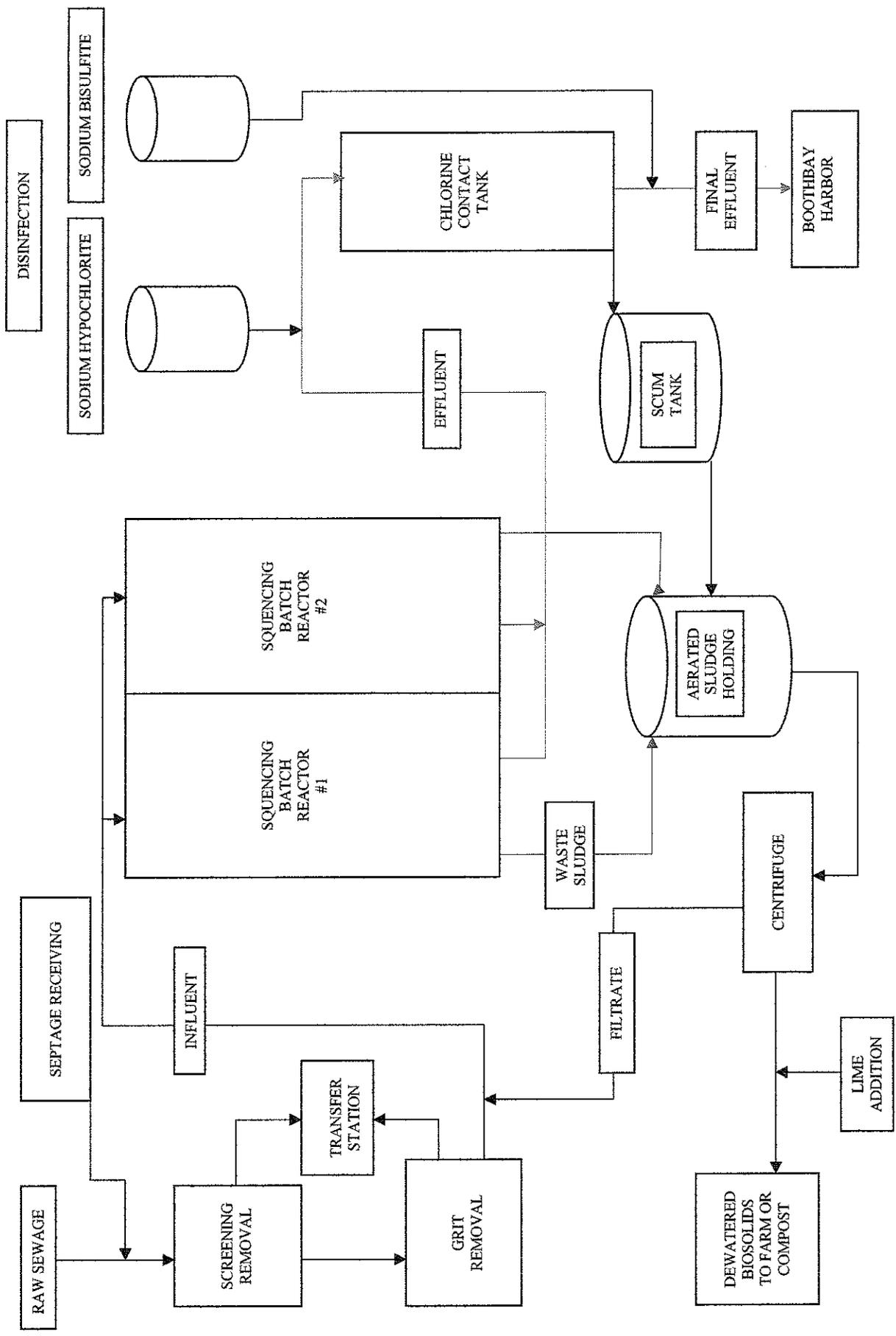
Booth Bay and vicinity (Southport, Boothbay Hbr, Boothbay)

3/27/08

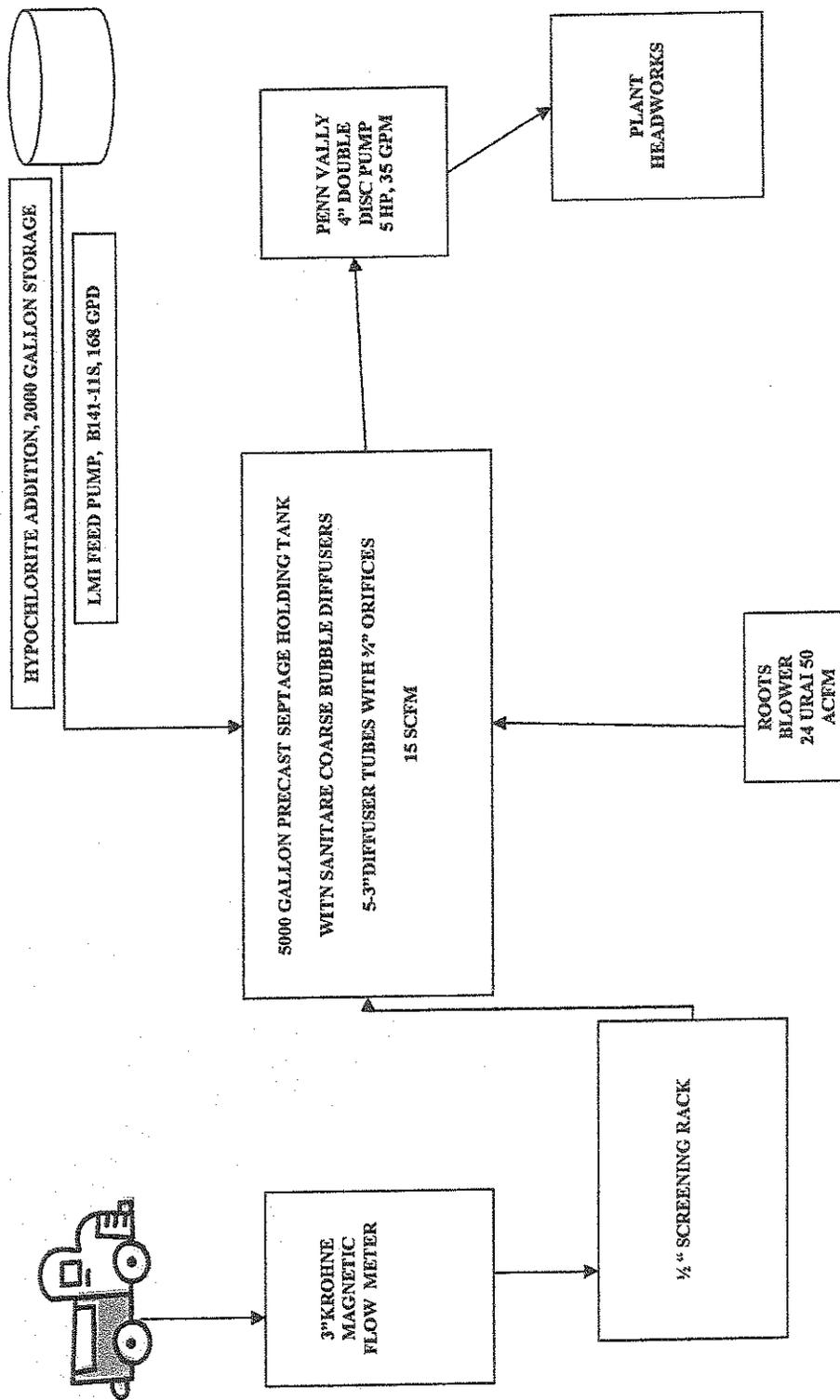


ATTACHMENT B

Boothbay Harbor Sewer District Process Control Schematic



**BOOTHBAY HARBOR SEWER DISTRICT
SEPTAGE PROCESSING
FLOW DIAGRAM**



MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

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A. GENERAL PROVISIONS

1. General compliance. All discharges shall be consistent with the terms and conditions of this permit; any changes in production capacity or process modifications which result in changes in the quantity or the characteristics of the discharge must be authorized by an additional license or by modifications of this permit; it shall be a violation of the terms and conditions of this permit to discharge any pollutant not identified and authorized herein or to discharge in excess of the rates or quantities authorized herein or to violate any other conditions of this permit.

2. Other materials. Other materials ordinarily produced or used in the operation of this facility, which have been specifically identified in the application, may be discharged at the maximum frequency and maximum level identified in the application, provided:

- (a) They are not
 - (i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
 - (ii) Known to be hazardous or toxic by the licensee.
- (b) The discharge of such materials will not violate applicable water quality standards.

3. Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of State law and the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- (a) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act, and 38 MRSA, §420 or Chapter 530.5 for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (b) Any person who violates any provision of the laws administered by the Department, including without limitation, a violation of the terms of any order, rule license, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

4. Duty to provide information. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

5. Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. Reopener clause. The Department reserves the right to make appropriate revisions to this permit in order to establish any appropriate effluent limitations, schedule of compliance or other provisions which may be authorized under 38 MRSA, §414-A(5).

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7. Oil and hazardous substances. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under section 311 of the Federal Clean Water Act; section 106 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980; or 38 MRSA §§ 1301, et. seq.

8. Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

9. Confidentiality of records. 38 MRSA §414(6) reads as follows. "Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports or information, or particular part or any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department."

10. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

11. Other laws. The issuance of this permit does not authorize any injury to persons or property or invasion of other property rights, nor does it relieve the permittee of its obligation to comply with other applicable Federal, State or local laws and regulations.

12. Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the EPA Administrator), upon presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

B. OPERATION AND MAINTENANCE OF FACILITIES

1. General facility requirements.

- (a) The permittee shall collect all waste flows designated by the Department as requiring treatment and discharge them into an approved waste treatment facility in such a manner as to

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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- maximize removal of pollutants unless authorization to the contrary is obtained from the Department.
- (b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.
 - (c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.
 - (d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.
 - (e) The permittee shall install flow measuring facilities of a design approved by the Department.
 - (f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

2. Proper operation and maintenance. 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. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

3. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Bypasses.

- (a) Definitions.
 - (i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
 - (ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.
- (c) Notice.
 - (i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

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- (ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).
- (d) Prohibition of bypass.
 - (i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (C) The permittee submitted notices as required under paragraph (c) of this section.
 - (ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

- (a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- (c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) The permitted facility was at the time being properly operated; and
 - (iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
 - (iv) The permittee complied with any remedial measures required under paragraph B(4).
- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

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C. MONITORING AND RECORDS

1. General Requirements. This permit shall be subject to such monitoring requirements as may be reasonably required by the Department including the installation, use and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). The permittee shall provide the Department with periodic reports on the proper Department reporting form of monitoring results obtained pursuant to the monitoring requirements contained herein.

2. Representative sampling. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. If effluent limitations are based wholly or partially on quantities of a product processed, the permittee shall ensure samples are representative of times when production is taking place. Where discharge monitoring is required when production is less than 50%, the resulting data shall be reported as a daily measurement but not included in computation of averages, unless specifically authorized by the Department.

3. Monitoring and records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.
- (c) Records of monitoring information shall include:
 - (i) The date, exact place, and time of sampling or measurements;
 - (ii) The individual(s) who performed the sampling or measurements;
 - (iii) The date(s) analyses were performed;
 - (iv) The individual(s) who performed the analyses;
 - (v) The analytical techniques or methods used; and
 - (vi) The results of such analyses.
- (d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.
- (e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

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D. REPORTING REQUIREMENTS

1. Reporting requirements.

- (a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - (i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - (ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).
 - (iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
- (b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.
- (d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
 - (i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.
 - (ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.
 - (iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.
- (e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (f) Twenty-four hour reporting.
 - (i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

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has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit.

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

(iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (f)(ii) of this section if the oral report has been received within 24 hours.

(g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e), and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.

(h) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

2. Signatory requirement. All applications, reports, or information submitted to the Department shall be signed and certified as required by Chapter 521, Section 5 of the Department's rules. State law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained by any order, rule, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, §349.

3. Availability of reports. Except for data determined to be confidential under A(9), above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by State law, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal sanctions as provided by law.

4. Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under this Section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

(a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(i) One hundred micrograms per liter (100 ug/l);

(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or

(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (i) Five hundred micrograms per liter (500 ug/l);
 - (ii) One milligram per liter (1 mg/l) for antimony;
 - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
 - (iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

- (a) All POTWs must provide adequate notice to the Department of the following:
 - (i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
 - (ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

1. Emergency action - power failure. Within thirty days after the effective date of this permit, the permittee shall notify the Department of facilities and plans to be used in the event the primary source of power to its wastewater pumping and treatment facilities fails as follows.

- (a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.
- (b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

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2. Spill prevention. (applicable only to industrial sources) Within six months of the effective date of this permit, the permittee shall submit to the Department for review and approval, with or without conditions, a spill prevention plan. The plan shall delineate methods and measures to be taken to prevent and or contain any spills of pulp, chemicals, oils or other contaminants and shall specify means of disposal and or treatment to be used.

3. Removed substances. Solids, sludges trash rack cleanings, filter backwash, or other pollutants removed from or resulting from the treatment or control of waste waters shall be disposed of in a manner approved by the Department.

4. Connection to municipal sewer. (applicable only to industrial and commercial sources) All wastewaters designated by the Department as treatable in a municipal treatment system will be cosigned to that system when it is available. This permit will expire 90 days after the municipal treatment facility becomes available, unless this time is extended by the Department in writing.

F. DEFINITIONS. For the purposes of this permit, the following definitions shall apply. Other definitions applicable to this permit may be found in Chapters 520 through 529 of the Department's rules

Average means the arithmetic mean of values taken at the frequency required for each parameter over the specified period. For bacteria, the average shall be the geometric mean.

Average monthly discharge limitation means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. Except, however, bacteriological tests may be calculated as a geometric mean.

Average weekly discharge limitation means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best management practices ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Composite sample means a sample consisting of a minimum of eight grab samples collected at equal intervals during a 24 hour period (or a lesser period as specified in the section on monitoring and reporting) and combined proportional to the flow over that same time period.

Continuous discharge means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.

Daily discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

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STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by approved States as well as by EPA. EPA will supply DMRs to any approved State upon request. The EPA national forms may be modified to substitute the State Agency name, address, logo, and other similar information, as appropriate, in place of EPA's.

Flow weighted composite sample means a composite sample consisting of a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge.

Grab sample means an individual sample collected in a period of less than 15 minutes.

Interference means a Discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- (1) Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- (2) Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Maximum daily discharge limitation means the highest allowable daily discharge.

New source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

- (a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or
- (b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal.

Pass through means a discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of 40 CFR parts 122, 123 and 124. Permit includes an NPDES general permit (Chapter 529). Permit does not include any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

Person means an individual, firm, corporation, municipality, quasi-municipal corporation, state agency, federal agency or other legal entity.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

STANDARD CONDITIONS APPLICABLE TO ALL PERMITS

Point source means any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged.

Pollutant means dredged spoil, solid waste, junk, incinerator residue, sewage, refuse, effluent, garbage, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or byproducts, heat, wrecked or discarded equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Publicly owned treatment works ("POTW") means any facility for the treatment of pollutants owned by the State or any political subdivision thereof, any municipality, district, quasi-municipal corporation or other public entity.

Septage means, for the purposes of this permit, any waste, refuse, effluent sludge or other material removed from a septic tank, cesspool, vault privy or similar source which concentrates wastes or to which chemicals have been added. Septage does not include wastes from a holding tank.

Time weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected over a constant time interval.

Toxic pollutant includes any pollutant listed as toxic under section 307(a)(1) or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA. Toxic pollutant also includes those substances or combination of substances, including disease causing agents, which after discharge or upon exposure, ingestion, inhalation or assimilation into any organism, including humans either directly through the environment or indirectly through ingestion through food chains, will, on the basis of information available to the board either alone or in combination with other substances already in the receiving waters or the discharge, cause death, disease, abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in such organism or their offspring.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Whole effluent toxicity means the aggregate toxic effect of an effluent measured directly by a toxicity test.



DEP INFORMATION SHEET

Appealing a Commissioner's Licensing Decision

Dated: May 2004

Contact: (207) 287-2811

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) in an administrative process before the Board of Environmental Protection (Board); or (2) in a judicial process before Maine's Superior Court. This INFORMATION SHEET, in conjunction with consulting statutory and regulatory provisions referred to herein, can help aggrieved persons with understanding their rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

DEP's *General Laws*, 38 M.R.S.A. § 341-D(4), and its *Rules Concerning the Processing of Applications and Other Administrative Matters* (Chapter 2), 06-096 CMR 2.24 (April 1, 2003).

HOW LONG YOU HAVE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written notice of appeal within 30 calendar days of the date on which the Commissioner's decision was filed with the Board. Appeals filed after 30 calendar days will be rejected.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, c/o Department of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017; faxes are acceptable for purposes of meeting the deadline when followed by receipt of mailed original documents within five (5) working days. Receipt on a particular day must be by 5:00 PM at DEP's offices in Augusta; materials received after 5:00 PM are not considered received until the following day. The person appealing a licensing decision must also send the DEP's Commissioner and the applicant a copy of the documents. All the information listed in the next section must be submitted at the time the appeal is filed. Only the extraordinary circumstances described at the end of that section will justify evidence not in the DEP's record at the time of decision being added to the record for consideration by the Board as part of an appeal.

WHAT YOUR APPEAL PAPERWORK MUST CONTAIN

The materials constituting an appeal must contain the following information at the time submitted:

1. *Aggrieved Status.* Standing to maintain an appeal requires the appellant to show they are particularly injured by the Commissioner's decision.
2. *The findings, conclusions or conditions objected to or believed to be in error.* Specific references and facts regarding the appellant's issues with the decision must be provided in the notice of appeal.
3. *The basis of the objections or challenge.* If possible, specific regulations, statutes or other facts should be referenced. This may include citing omissions of relevant requirements, and errors believed to have been made in interpretations, conclusions, and relevant requirements.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.

5. *All the matters to be contested.* The Board will limit its consideration to those arguments specifically raised in the written notice of appeal.
6. *Request for hearing.* The Board will hear presentations on appeals at its regularly scheduled meetings, unless a public hearing is requested and granted. A request for public hearing on an appeal must be filed as part of the notice of appeal.
7. *New or additional evidence to be offered.* The Board may allow new or additional evidence as part of an appeal only when the person seeking to add information to the record can show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process or show that the evidence itself is newly discovered and could not have been presented earlier in the process. Specific requirements for additional evidence are found in Chapter 2, Section 24(B)(5).

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license file is public information made easily accessible by DEP. Upon request, the DEP will make the material available during normal working hours, provide space to review the file, and provide opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer questions regarding applicable requirements.
3. *The filing of an appeal does not operate as a stay to any decision.* An applicant proceeding with a project pending the outcome of an appeal runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge initiation of the appeals procedure, including the name of the DEP project manager assigned to the specific appeal, within 15 days of receiving a timely filing. The notice of appeal, all materials accepted by the Board Chair as additional evidence, and any materials submitted in response to the appeal will be sent to Board members along with a briefing and recommendation from DEP staff. Parties filing appeals and interested persons are notified in advance of the final date set for Board consideration of an appeal or request for public hearing. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision. The Board will notify parties to an appeal and interested persons of its decision.

II. APPEALS TO MAINE SUPERIOR COURT

Maine law allows aggrieved persons to appeal final Commissioner licensing decisions to Maine's Superior Court, see 38 M.R.S.A. § 346(1); 06-096 CMR 2.26; 5 M.R.S.A. § 11001; & MRCivP 80C. Parties to the licensing decision must file a petition for review within 30 days after receipt of notice of the Commissioner's written decision. A petition for review by any other person aggrieved must be filed within 40-days from the date the written decision is rendered. The laws cited in this paragraph and other legal procedures govern the contents and processing of a Superior Court appeal.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, contact the DEP's Director of Procedures and Enforcement at (207) 287-2811.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.
