



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

Allan Moir, Superintendent
Sewer Department
Town of Kennebunkport
P.O. Box 1038
Kennebunkport, Maine 04046

June 21, 2005

RE: Maine Pollutant Discharge Elimination System Permit (MEPDES) # ME0101184
Maine Waste Discharge License (WDL) Application # W002626-5L-E-R
Final Permit/License

Dear Mr. Moir:

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.*"

We would like to make you aware of the fact that your monthly Discharge Monitoring Reports (DMR) may not reflect the revisions in this permitting action for several months however, you are required to report applicable test results for parameters required by this permitting action that do not appear on the DMR. Please see the attached April 2003 O&M Newsletter article regarding this matter.

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

Sincerely,

David Silver
Division of Water Resource Regulation
Bureau of Land and Water Quality

Enc. Steve Arnold, DEP/SMRO

Roger Janson, USEPA

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688
RAY BLDG., HOSPITAL ST.

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

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

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 764-1507

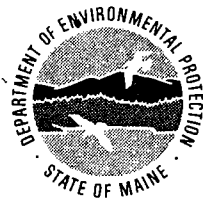
DMR Lag

(reprinted from April 2003 O&M Newsletter)

When the Department renews discharge permits, the parameter limits may change or parameters may be added or deleted. In some cases, it is merely the replacement of the federally issued NPDES permit with a state-issued MEPDES permit that results in different limits. When the new permit is finalized, a copy of the permit is passed to our data entry staff for coding into EPA's Permits Compliance System (PCS) database. PCS was developed in the 1970's and is not user-friendly. Entering or changing parameters can take weeks or even months. This can create a lag between the time your new permit becomes effective and the new permit limits appearing on your DMRs. If you are faced with this, it can create three different situations that have to be dealt with in different ways.

1. If the parameter was included on previous DMRs, but only the limit was changed, there will be a space for the data. Please go ahead and enter it. When the changes are made to PCS, the program will have the data and compare it to the new limit.
2. When a parameter is eliminated from monitoring in your new permit, but there is a delay in changing the DMR, you will have a space on the DMR that needs to be filled. For a parameter that has been eliminated, please enter the space on the DMR for that parameter only with "NODI-9" (No Discharge Indicator Code #9). This code means monitoring is conditional or not required this monitoring period.
3. When your new permit includes parameters for which monitoring was not previously required, and coding has not caught up on the DMRs, there will not be any space on the DMR identified for those parameters. In that case, please fill out an extra sheet of paper with the facility name and permit number, along with all of the information normally required for each parameter (parameter code, data, frequency of analysis, sample type, and number of exceedances). Each data point should be identified as monthly average, weekly average, daily max, etc. and the units of measurement such as mg/L or lb/day. Staple the extra sheet to the DMR so that the extra data stays with the DMR form. Our data entry staff cannot enter the data for the new parameters until the PCS coding catches up. When the PCS coding does catch up, our data entry staff will have the data right at hand to do the entry without having to take the extra time to seek it from your inspector or from you.

EPA is planning significant improvements for the PCS system that will be implemented in the next few years. These improvements should allow us to issue modified permits and DMRs concurrently. Until then we appreciate your assistance and patience in this effort.



DEPARTMENT ORDER
IN THE MATTER OF

TOWN OF KENNEBUNKPORT) MAINE POLLUTANT DISCHARGE
PUBLICLY OWNED TREATMENT WORKS) ELIMINATION SYSTEM PERMIT
KENNEBUNKPORT, YORK COUNTY) AND
#ME0101184) WASTE DISCHARGE LICENSE
#W002626-5L-E-R APPROVAL) RENEWAL

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, §1251, et seq., and Maine law 38 M.R.S.A., §414-A et seq., and applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the TOWN OF KENNEBUNKPORT (Kennebunkport hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The applicant has applied to the Department for renewal of Waste Discharge License (WDL) #W002626-5L-D-R and Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101184, which were issued on October 9, 2001 and expired on March 14, 2005. The permit authorized the monthly average discharge of up to 0.70 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Kennebunk River, Class SB, in Kennebunkport, Maine.

PERMIT SUMMARY

This permitting action is similar to the October 9, 2001 permitting action in that it is:

1. Carrying forward the monthly average discharge flow limitation of 0.70 MGD;
2. Carrying forward the monthly average, weekly average and daily maximum technology-based concentration and mass limitations for biochemical oxygen demand (BOD₅) and total suspended solids (TSS);
3. Carrying forward the daily maximum technology-based concentration limitation for settleable solids;
4. Carrying forward the monthly average and daily maximum water quality-based concentration limitations for fecal coliform bacteria;
5. Carrying forward the daily maximum water quality-based concentration limitation for total residual chlorine (TRC);
6. Carrying forward surveillance and screening level whole effluent toxicity (WET) and chemical-specific (priority pollutant) testing and,
7. Carrying forward the minimum monitoring frequency requirements for all monitored parameters.

PERMIT SUMMARY (cont'd)

This permitting action is different from the October 9, 2001 permitting action in that it is

1. Establishing monthly average and daily maximum water quality based mass and concentration limits for copper.
2. Requiring the permittee to maintain a current Wet Weather Management Plan for Department review and approval; and
3. Requiring the permittee to maintain a current written comprehensive Operation & Maintenance (O&M) Plan.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated May 19, 2005, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, 38 M.R.S.A. §464(4)(F), will be met, in that:
 - (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - (c) 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) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

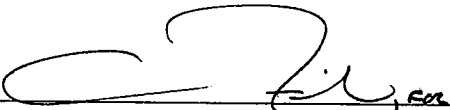
ACTION

THEREFORE, the Department APPROVES the above noted application of the TOWN OF KENNEBUNKPORT to discharge a monthly average of up to 0.70 MGD of secondary treated sanitary wastewater to the tidewaters of the Kennbunk River, Class SB, in Kennebunkport, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. The expiration date of this permit is five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 22ND DAY OF JUNE, 2005.

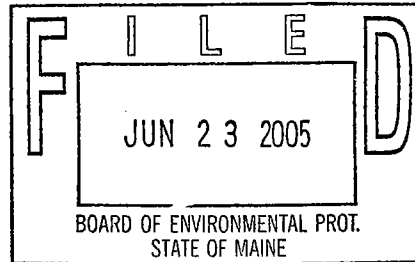
DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: 
DAWN R. GALLAGHER, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: February 15, 2005

Date of application acceptance: February 15, 2005



Date filed with Board of Environmental Protection: _____

This Order prepared by David Silver, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS
A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- During the period beginning the effective date of this permit and lasting through permit expiration, the permittee is authorized to discharge **secondary treated sanitary wastewater from Outfall #001** to the tidewaters of the Kennebunk River, Class SB. Such discharges shall be limited and monitored by the permittee as specified below^(a):

| Effluent Characteristic | Discharge Limitations | | | | | Monitoring Requirements | | |
|--|------------------------------|-----------------------------|----------------------------|-------------------------------|-----------------------------|----------------------------|------------------------------------|--------------------------|
| | Monthly Average as specified | Weekly Average as specified | Daily Maximum as specified | Monthly Average as specified | Weekly Average as specified | Daily Maximum as specified | Measurement Frequency as specified | Sample Type as specified |
| Flow [50050] | 0.70 MGD [03] | --- | Report MGD [03] | --- | --- | --- | Continuous [99/99] | Recorder [RC] |
| BOD ₅ ⁽²⁾ [00310] | 175 lbs./day [26] | 263 lbs./day [26] | 292 lbs./day [26] | 30 mg/L [19] | 45 mg/L [19] | 50 mg/L [19] | 2/Week [02/07] | 24-Hour Composite [24] |
| TSS ⁽²⁾ [00530] | 175 lbs./day [26] | 263 lbs./day [26] | 292 lbs./day [26] | 30 mg/L [19] | 45 mg/L [19] | 50 mg/L [19] | 2/Week [02/07] | 24-Hour Composite [24] |
| Settleable Solids [00545] | --- | --- | --- | --- | --- | 0.3 ml/L [25] | 1/Day [01/01] | Grab [GR] |
| Fecal Coliform Bacteria ⁽³⁾ [31616] | --- | --- | --- | 15/100 ml ⁽⁴⁾ [13] | --- | 50/100 ml [13] | 2/Week [02/07] | Grab [GR] |
| Total Residual Chlorine ⁽³⁾ [00665] | --- | --- | --- | --- | --- | 0.056 mg/L [19] | 1/Day [01/01] | Grab [GR] |
| Copper (Total) [01042] | 0.32 lbs./day [26] | --- | 0.073 lbs./day [26] | 82 ug/L [19] | --- | 18 ug/L [19] | 1/Quarter [01/901] | 24-Hour Composite [24] |
| pH [00400] | --- | --- | --- | --- | --- | 6.0 - 9.0 SU [12] | 1/Day [01/01] | Grab [GR] |

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports. See pages 7 and 8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

SURVEILLANCE LEVEL TESTING: Beginning upon issuance of this permit and last through 12 months prior to permit expiration.

| Whole Effluent Toxicity (WET) ⁽⁵⁾ | Daily Maximum | Minimum Frequency | Sample Type |
|--|---------------------|-------------------|---------------------------|
| <u>Acute No Observed Effect Level (A-NOEL)</u> Invertebrate-Mysid Shrimp (<i>Mysidopsis bahia</i>) [TDA3E] | Report % [23] | 1/Year [01/YR] | Composite [24] |
| Vertebrate-Inland Silverside (<i>Menidia berrylina</i>) [TDA6B] | Report % [23] | 1/Year [01/YR] | Composite [24] |
| <u>Chronic No Observed Effect Level (C-NOEL)</u> Invertebrate-Sea Urchin (<i>Arbacia punctulata</i>) [TBH3A] | Report % [23] | 1/Year [01/YR] | Composite [24] |
| Vertebrate-Inland Silverside (<i>Menidia berrylina</i>) [TBP6B] | Report % [23] | 1/Year [01/YR] | Composite [24] |
| Chemical-Specific ⁽⁶⁾ [50008] | Report ug/L [28] | 1/Year [01/YR] | Composite/Grab [24/GR] |

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

Footnotes: See pages 7 and 8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

SCREENING LEVEL TESTING: Beginning 12 months prior to permit expiration and lasting through permit expiration for Outfall #001.

| Whole Effluent Toxicity (WET) ⁽⁵⁾ | Daily Maximum | Minimum Frequency | Sample Type |
|--|---------------------|----------------------|---------------------------|
| <u>Acute No Observed Effect Level (A-NOEL)</u> Invertebrate-Mysid Shrimp (<i>Mysidopsis bahia</i>) [TDA3E] | Report % [23] | 1/Quarter [01/90] | Composite [24] |
| Vertebrate-Inland Silverside (<i>Menidia beryllina</i>) [TDA6B] | Report % [23] | 1/Quarter [01/90] | Composite [24] |
| <u>Chronic No Observed Effect Level (C-NOEL)</u> Invertebrate-Sea Urchin (<i>Arbacia punctulata</i>) [TBH3A] | Report % [23] | 1/Quarter [01/90] | Composite [24] |
| Vertebrate-Inland Silverside (<i>Menidia beryllina</i>) [TBP6B] | Report % [23] | 1/Quarter [01/90] | Composite [24] |
| Chemical-Specific ⁽⁶⁾ [50008] | Report ug/L [28] | 1/Year [01/YR] | Composite/Grab [24/GR] |

The italicized numeric values bracketed in the table and in subsequent text are code numbers that Department personnel utilize to code the monthly Discharge Monitoring Reports.

Footnotes: See pages 7 and 8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

Footnotes:

1. **Monitoring** – All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Any change in sampling location must be approved by the Department in writing. Sampling and analysis must be conducted in accordance with: a) methods approved by 40 Code of Federal Regulations (CFR) Part 136; b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136; or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services.
2. **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.
3. **Bacteria and TRC Limits** – Fecal coliform bacteria and total residual chlorine (TRC) limits and monitoring requirements are in effect year-round at the request of the Maine Department of Marine Resources in order to protect local shellfish resources near the outfall and to protect the health, safety and welfare of the public utilizing the receiving waters in the non-summer months.
4. **Bacteria Reporting** – The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results shall be reported as such.
5. **Whole Effluent Toxicity (WET)** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute (23%) and chronic (5.3%) water quality thresholds), 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.

Beginning upon issuance of the permit and lasting through 12 months prior to permit expiration, the permittee shall conduct surveillance level WET testing at a minimum frequency of once per year (1/Year). Tests shall be conducted in a different calendar quarter of each year such that tests are conducted in all four calendar quarters during the term of the permit. Acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*) and the inland silverside (*Menidia beryllina*). Chronic tests shall be conducted on the inland silverside (*Menidia beryllina*) and on the sea urchin (*Arbacia punctulata*). Results shall be submitted within 30 days of receiving the results from the laboratory conducting the testing.

SPECIAL CONDITIONS

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

Footnotes:

Beginning 12 months prior to permit expiration and lasting through permit expiration, the permittee shall conduct screening level WET testing at a minimum frequency of once per quarter (1/Quarter) for four consecutive calendar quarters. Acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*) and the inland silverside (*Menidia beryllina*). Chronic tests shall be conducted on the inland silverside (*Menidia beryllina*) and on the sea urchin (*Arbacia punctulata*). Results shall be submitted within 30 days of receiving the results from the laboratory conducting the testing. The permittee is also required to analyze the effluent for the parameters specified in the analytical chemistry on the form in Attachment A of this permit each time a WET test is performed.

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following USEPA methods manuals.

- a. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Marine and Estuarine Organisms, Fifth 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, Third Edition, October 2002, EPA-821-R-02-012.
6. **Chemical-Specific Testing** – Priority pollutants (chemical-specific testing pursuant to Department rule Chapter 530.5) are those parameters listed by the USEPA pursuant to Section 307(a) of the Clean Water Act and published at 40 CFR Part 122, Appendix D, Tables II and III. **Beginning upon issuance of this permit and lasting through permit expiration, the permittee shall conduct surveillance and screening level chemical-specific testing at a minimum frequency of once per year (1/Year). Chemical-specific testing shall be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, when applicable. Chemical-specific 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. Results shall be submitted to the Department within thirty (30) days of the permittee receiving the data report from the laboratory conducting the testing. 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.**

All mercury sampling 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.

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 discharges shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.
4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. DISINFECTION

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

D. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade III** certificate pursuant to Title 32 M.R.S.A. §4171 et seq. All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

E. 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 **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office** such that the DMR's are received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the following address:

Department of Environmental Protection
Bureau of Land and Water Quality
Southern Maine Regional Office
Division of Engineering, Compliance and Technical Assistance
312 Canco Road
Portland, Maine 04103

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 wastewater collection and treatment system from an indirect discharger in a primary industrial category discharging process wastewater; and
2. Any substantial change (increase or decrease) in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants into the system at the time of permit issuance. For the purposes of this section, notice regarding substantial change shall include information on:
 - (a) the quality and quantity of wastewater introduced to the wastewater collection and treatment system; and
 - (b) any anticipated impact caused by the change in the quantity or quality of the wastewater to be discharged from the treatment system.

G. LIMITATIONS FOR INDUSTRIAL USERS

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

H. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from Outfall #001. Discharges of wastewater from any other point source are not authorized under this permit, and shall be reported in accordance with Standard Condition B(5), *Bypasses*, of this permit.

I. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff shall develop and maintain a Wet Weather Management (WET) 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 WET 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.

Once the Wet Weather Management Plan has been approved, the permittee shall review their plan annually and record any necessary changes to keep the plan up to date.

SPECIAL CONDITIONS

J. OPERATION & MAINTENANCE (O&M) PLAN

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 USEPA personnel upon request.

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

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.

K. DISPOSAL OF SEPTAGE WASTE IN WASTEWATER TREATMENT FACILITY

During the effective period of this permit, the permittee is authorized to receive **2,000 gallons per day** of septage into its waste water treatment facility subject to the following terms and conditions:

- 1) This approval is limited to methods and plans described in the application and supporting documents. Any variations are subject to review and approval prior to implementation.
- 2) At no time shall addition of septage cause or contribute to effluent quality violations. If such conditions do exist, receipt of septage shall be suspended until effluent quality can be maintained.
- 3) The permittee shall maintain records which shall include, as a minimum, the following by date: volume of septage received, source of the septage (name of municipality), the hauler transporting the septage, the dates and volume of septage added to the waste treatment influent and test results.
- 4) Additional septage shall not cause the treatment facilities design capacity to be exceeded. If, for any reason, the treatment facility becomes overloaded, receipt of septage shall be reduced or terminated in order to eliminate the overload condition.
- 5) Septage known to be harmful to the treatment processes shall not be accepted. Wastes which contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation shall be refused.
- 6) Holding tank waste water shall not be recorded as septage and should not be reported in the treatment facilities influent flow.

SPECIAL CONDITIONS

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 anytime 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.

ATTACHMENT A

MARINE WHOLE EFFLUENT TOXICITY (WET) TEST REPORT

Facility _____ DEP License No _____ NPDES permit No _____

Contact person _____ Telephone No _____

Date initially sampled _____ Date tested _____ Chlorinated? _____

Test type: mm/dd/yy screening mm/dd/yy surveillance
Dechlorinated? _____

Results % effluent Test required by: _____ DEP/EPA

| | Mysid shrimp | sea urchin | silverside |
|--------|--------------|------------|------------|
| LC50 | | | |
| A-NOEL | | | |
| C-NOEL | | | |

Receiving Water Concentration
A-NOEL _____
C-NOEL _____

| Data summary | Mysid shrimp | sea urchin | silver side | | final wt (mg) |
|------------------------|--------------|--------------|-------------|------|---------------|
| | % survival | % fertilized | % survival | C>80 | |
| QC standard | A>90 | >70 | A>90 | C>80 | >0.50 |
| lab control | | | | | |
| receiving water contrl | | | | | |
| conc. 1 (%) | | | | | |
| conc. 2 (%) | | | | | |
| conc. 3 (%) | | | | | |
| conc. 4 (%) | | | | | |
| conc. 5 (%) | | | | | |
| conc. 6 (%) | | | | | |
| stat test used | | | | | |

place * next to values statistically different from controls

| Reference toxicant | Mysid shrimp | sea urchin | silver side | |
|--------------------|--------------|------------|-------------|--------|
| | LC50/A-NOEL | C-NOEL | LC50/A-NOEL | C-NOEL |
| toxicant /date | | | | |
| limits (mg/l) | | | | |
| results (mg/l) | | | | |

| Salinity Adjustment | brine |
|---------------------|----------|
| | sea salt |
| | other |

Comments _____

Laboratory Conducting Tests. To the best of my knowledge this information is true, accurate, and complete

signature _____ company _____
printed name _____ address _____
tel. no. _____

ANALYTICAL CHEMISTRY RESULTS
MARINE WATERS

Date collected _____ mm/dd/yy

Date analyzed _____ mm/dd/yy

Lab ID No: _____

| Analyte | Report | Results | | Detection level | Method |
|-------------------------|--------|-----------------|----------|-----------------|--------|
| | Units | receiving water | effluent | | |
| Ammonia nitrogen | µg/L | | | µg/L | |
| Salinity | ppt | | | ppt | |
| Total residual oxidants | mg/L | | | mg/L | |
| Total organic carbon | mg/L | | | mg/L | |
| Total solids | mg/L | | | mg/L | |
| Total suspended solids | mg/L | | | mg/L | |
| Total aluminum | µg/L | | | µg/L | |
| Total cadmium | µg/L | | | µg/L | |
| Total chromium | µg/L | | | µg/L | |
| Total copper | µg/L | | | µg/L | |
| Total lead | µg/L | | | µg/L | |
| Total nickel | µg/L | | | µg/L | |
| Total zinc | µg/L | | | µg/L | |
| other (pH) | S.U. | | | S.U. | |
| other () | | | | | |

Comments

Laboratory conducting test. To the best of my knowledge this information is true, accurate, and complete

| | | | |
|--------------|-------|----------|-------|
| signature | _____ | lab name | _____ |
| printed name | _____ | address | _____ |
| tel. no. | _____ | | _____ |

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

FACT SHEET

Date: May 19, 2005

MEPDES PERMIT: #ME0101184
WASTE DISCHARGE LICENSE: #W002626-5L-E-R

NAME AND ADDRESS OF APPLICANT:

**TOWN OF KENNEBUNKPORT
P.O. BOX 1038
KENNEBUNKPORT, ME 04046**

COUNTY: York County

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**School Street
Kennebunkport, Maine**

RECEIVING WATER / CLASSIFICATION: Kennebunk River/Class SB

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Allan Moir, Superintendent
(207) 967-2245**

1. APPLICATION SUMMARY

- a. Application: The applicant has applied to the Department for renewal of Waste Discharge License (WDL) #W002626-5L-D-R and Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0101184, which were issued on October 9, 2001 and is scheduled to expire on March 14, 2005. The permit authorized the monthly average discharge of up to 0.70 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Kennebunk River, Class SB, in Kennebunkport, Maine.

2. PERMIT SUMMARY

b. This permitting action is similar to the October 9, 2001 permitting action in that it is:

1. Carrying forward the monthly average discharge flow limitation of 0.70 MGD;
2. Carrying forward the monthly average, weekly average and daily maximum technology-based concentration and mass limitations for biochemical oxygen demand (BOD₅) and total suspended solids (TSS);
3. Carrying forward the daily maximum technology-based concentration limitation for settleable solids;
4. Carrying forward the monthly average and daily maximum water quality-based concentration limitations for fecal coliform bacteria;
5. Carrying forward the daily maximum water quality-based concentration limitation for total residual chlorine (TRC);
6. Carrying forward surveillance and screening level whole effluent toxicity (WET) and chemical-specific (priority pollutant) testing requirements; and
7. Carrying forward the minimum monitoring frequency requirements for all monitored parameters.

This permitting action is different from the October 9, 2001 action in that it is

1. Establishing monthly average and daily maximum water quality based mass and concentration limits for copper.
 2. Requiring the permittee to maintain a current Wet Weather Management Plan for Department review and approval; and
 3. Requiring the permittee to maintain a current written comprehensive Operation & Maintenance (O&M) Plan.
- c. Facility History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for the Town of Kennebunkport.

September 30, 1996 – The EPA issued a renewal of the Town’s National Pollutant Discharge Elimination System (NPDES) permit #ME0101184 for a five year term.

March 14, 2000 – The Department issued Waste Discharge License, WDL #W002626-5L-C-R.

May 23, 2000 – The Department administratively modified the WDL by establishing interim mean and maximum concentration limitations of 7.5 ng/L and 11.2 ng/L, respectively, for mercury.

2. PERMIT SUMMARY (Cont'd)

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

July 5, 2001 – The Town of Kennebunkport submitted an application to the Department to modify WDL #W002626-5L-C-R to incorporate the terms and conditions of the MEPDES program.

October 9, 2001 – The Department modified the March 14, 2000 WDL to convert it into a MEPDES permit.

December 20, 2002 – The Department provided written notification to the Town of Kennebunkport that year-round disinfection would need to be implemented in the near future to protect the health and welfare of the public utilizing the receiving waters in the non-summer months.

December 17, 2003 – The Town of Kennebunkport submitted a scope of work and schedule to implemented year-round disinfection at the waste water treatment facility.

February 15, 2005 – The Town of Kennebunkport submitted an application to the Department to renew MEPDES permit #ME0101184.

- d. Source Description: The facility located at School Street in Kennebunkport, treats domestic and commercial waste waters from the town. There are no industrial users contributing flow greater than 10% of the volume of waste water received by the treatment facility. The facility is also authorized to accept and treat up to 2,000 gallons of septage per day into the waste treatment process.

A map showing the location of the treatment facility and the receiving waters is included as an Attachment A to the Fact Sheet.

- e. Wastewater Treatment:

The collection system includes 16 pump stations. Screenings and grit are removed at the headworks by means of 3 automatic rotary screens. Biological treatment is accomplished in three – 104,000 gallon aeration basins and two – secondary clarifiers that are each 40 feet in diameter. The old aeration tanks are off-line and out of service. The secondary effluent is then disinfected using sodium hypochlorite in two chlorine contact tanks and dechlorinated using sodium bisulfite. The treated effluent is conveyed to the river through a 10-inch diameter pipe that is 2,330 feet long (force main) followed by a 15-16 inch, 720 foot long gravity outfall pipe without a diffuser. Sludge dewatering is accomplished by two 0.5 meter belt filter presses, dewatered sludge is composted on-site. There are no known combined sewer overflow points in the wastewater conveyance system associated with the existing system. See Attachment B of this Fact Sheet for a schematic of the waste water treatment process.

3. CONDITIONS OF PERMIT

Maine law, 38 M.R.S.A. §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 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. §420, and Department Rule Chapter 530.5, *Surface Water Toxics Control Program*, require the regulation of toxic substances at the levels set forth for Federal Water Quality Criteria as published by the U.S. Environmental Protection Agency pursuant to the Clean Water Act.

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A. §469 classifies the Kennebunk River at the point of discharge as a Class SB waters. Maine law, 38 M.R.S.A. §465-B(2) describes the standards for Class SB waters.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2002 Integrated Water Quality Monitoring and Assessment Report, prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the marine waters at the Kennebunkport outfall (Waterbody #824) as, "Category 2: Estuary and Marine Waters Attaining Some Designated Uses, No Use is Threatened, and Insufficient Data Or Information To Determine If Other Uses Are Attained or Threatened." Currently, portions of the Maine Department of Marine Resources shellfish harvesting area #C6 in the Kennebunk River is closed to the harvesting of shellfish due to insufficient (limited) ambient water quality data to meet the standards in the National Shellfish Sanitation Program. Compliance with the fecal coliform bacteria limits in this permitting action and year-round disinfection ensures that the discharge from the Kennebunkport wastewater treatment facility will not cause or contribute to the shellfish harvesting closure. The shellfish closure area are identified on the map included as an Attachment C to the Fact Sheet.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow: The previous permitting action established a monthly average discharge flow limitation of 0.70 MGD and continuous recorder monitoring requirement, which is being carried forward in this permitting action as it remains representative of the design capacity of the treatment works.
- b. Dilution Factors: Department rule, 06-096 CMR Chapter 530.5(D)(3)(b), *Surface Water Toxics Control Program*, 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 and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE or CORMIX." Based on the location and configuration of the outfall pipe, the Department has determined that the dilution factors associated with the discharge from Kennebunkport are as follows:

Acute = 4.3:1

Chronic = 19:1

Harmonic Mean^(*) = 57:1

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

Footnote:

- * The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the U.S. EPA publication, "*Technical Support Document for Water Quality-Based Toxics Control*" (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

- c. Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): The previous permitting action established monthly average and weekly average BOD₅ & TSS concentration limits of 30 mg/L and 45 mg/L, respectively, which were based on secondary treatment requirements of the Clean Water Act of 1977 §301(b)(1)(B) as defined in 40 CFR 133.102 and Department rule, Chapter 525(3)(III). The previous permitting action also established daily maximum BOD₅ & TSS concentration limits of 50 mg/L based on a Department best professional judgement (BPJ) of best practicable treatment (BPT), and a minimum monitoring frequency requirement of three times per week. All three technology-based concentration limits are being carried forward in this permitting action. Department rule Chapter 523(6)(f) states that all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass. The previous permitting action established monthly average, weekly average and daily maximum technology-based mass limits of 175 lbs./day, 263 lbs./day, and 292 lbs./day, respectively, which are being carried forward in this permitting action, as follows:

Monthly Average Mass Limit: $(30 \text{ mg/L})(8.34 \text{ lbs./gallon})(0.70 \text{ MGD}) = 175 \text{ lbs./day}$

Weekly Average Mass Limit: $(45 \text{ mg/L})(8.34 \text{ lbs./day})(0.70 \text{ MGD}) = 263 \text{ lbs./day}$

Daily Maximum Mass Limit: $(50 \text{ mg/L})(8.34 \text{ lbs./day})(0.70 \text{ MGD}) = 292 \text{ lbs./day}$

This permitting action is also carrying forward the requirement for a 30-day average minimum of 85% removal of BOD₅ & TSS pursuant to Chapter 525(3)(III)(a)(3) and (b)(3) of the Department's rules.

This permitting action is carrying forward the minimum monitoring frequency requirement of two times per week (2/Week) based on Department guidance for POTWs permitted to discharge between 0.5 and 1.5 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 wastewater, and the minimum monitoring frequency requirement of once per day.

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

- e. Fecal Coliform Bacteria: The previous permitting action established seasonal monthly average and daily maximum water quality-based concentration limits for fecal coliform bacteria of 15 colonies/100 ml (geometric mean) and 50 colonies/100 ml (instantaneous level), respectively, based on the National Shellfish Sanitation Program and a minimum monitoring frequency requirement of two times per week. This permitting action is carrying forward both water quality-based concentration limits based on the National Shellfish Sanitation Program and the minimum monitoring frequency requirement of two times per week (2/Week) based on Department guidance for POTWs permitted to discharge between 0.5 and 1.5 MGD. Pursuant to a request from the Maine Department of Marine Resources, disinfection is required year-round in order to ensure compliance with fecal coliform bacteria limits and thereby providing for the protection of local shellfish resources and the protection of the health and welfare of the public utilizing the receiving waters for recreation in the non-summer months.
- f. Total Residual Chlorine (TRC): The previous permitting action established a daily maximum water quality-based concentration limitation of 0.056 mg/L, and a minimum monitoring frequency requirement of once per day for TRC. Department licensing/permitting actions impose the more stringent of either a water quality-based or BPT based limit. End-of-pipe water quality based concentration thresholds may be calculated as follows:

| Acute (A) Criterion | Chronic (C) Criterion | A & C Dilution Factors | Calculated | |
|------------------------|--------------------------|---------------------------|--------------------|----------------------|
| | | | Acute Threshold | Chronic Threshold |
| 0.013 mg/L | 0.0075 mg/L | 4.3:1 (A) 19:1 (C) | 0.056 mg/L | 0.14 mg/L |

The Department has established a general daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that must dechlorinate the effluent in order to consistently achieve compliance with water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively unless water quality criteria require more stringent limitations for TRC. The Kennebunkport wastewater treatment process does include effluent dechlorination following disinfection because of the inability to consistently achieve compliance with water quality based thresholds without dechlorination. Therefore, this permitting action is carrying forward the daily maximum water quality-based concentration limits of 0.056 mg/L, and minimum monitoring frequency of once per day (1/Day) based on Department guidance for POTWs permitted to discharge between 0.5 and 1.5 MGD.

- g. pH: The previous licensing action established a pH range limit of 6.0 – 9.0 standard units (SU), which was based on a Department rule found at Chapter 525(3)(III)(c), and a minimum monitoring frequency requirement of once per day. This permitting action is carrying forward the minimum monitoring frequency requirement of once per day (1/Day) based on Department guidance for POTWs permitted to discharge between 0.5 and 1.5 MGD.

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

- h. Whole Effluent Toxicity (WET) and 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 rule, 06-096 CMR Chapter 530.5, *Surface Water Toxics Control Program*, set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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 WET tests are performed on invertebrate species mysid shrimp (*Mysidopsis bahia*) and vertebrate species inland silverside (*Menidia beryllina*). Chronic WET tests are performed on sea urchin (*Arbacia punctulata*) and inland silverside. Chemical-specific monitoring 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.

Pursuant to criteria established in Department rule Chapter 530.5, Kennebunkport has been placed in the high frequency category for WET testing, as the facility has a dilution ratio of less than 20:1 and in the low frequency category for chemical-specific testing, as the facility is permitted to discharge less than 1.0 MGD.

The previous permitting action established surveillance and screening level WET and chemical-specific testing requirements for the Town of Kennebunkport in accordance with the Maine Department of Environmental Protection guidance entitled, Toxicity Program Implementation Protocols, July 1998 and Department rule Chapter 530.5(B)(7)(c).

A review of the WET and chemical-specific test results on file with the Department indicates that the Town of Kennebunkport has fulfilled the Chapter 530.5 testing requirements established in WDL #W002626-5L-D-R. See Attachment D of this Fact Sheet for a summary of the WET test results and Attachment E of this Fact Sheet for a summary of the chemical-specific test dates. Department rule Chapter 530.5 and Protocol E(1) of the Toxicity Program Implementation Protocols states that statistical evaluations shall be periodically performed on the most recent 60 months of WET and chemical-specific data for a given facility to determine if water quality based limitations must be included in the permit.

On May 19, 2005, the Department performed a statistical evaluation on the aforementioned tests results in accordance with the statistical approach outlined in the USEPA's March 1991 document entitled, Technical Support Document (TSD) for Water Quality Based Toxics Control, Chapter 3.3.2, and with the Toxicity Program Implementation Protocols.

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

Chapter 530.5 §C(2) states when a discharge "...contains pollutants at levels that have a reasonable potential to cause or contribute to an ambient excursion in excess of a numeric or narrative water quality criterion, appropriate water quality based limits must be established in the permit upon issuance."

Chapter 530.5 §C(3) also states that if data indicates that a discharge is causing an exceedance of applicable AWQC, then: "(1) the Department must notify the licensee of the exceedance; (2) the licensee must submit a toxicity reduction evaluation (TRE) plan for review and approval within 30 days of receipt of notice and implement the TRE after Department approval; (3) the Department must modify the waste discharge license to specify effluent limits and monitoring requirements necessary to control the level of pollutant and meet receiving water classification standards within 180 days of the Department's approval of the TRE."

WET testing

The 5/19/05 statistical evaluation indicates that the discharge does not exceed or have a reasonable potential (RP) to exceed critical acute or chronic thresholds (23% and 5.3% respectively) for any of the WET species tested to date. Therefore, beginning upon issuance of this permit and lasting through 12 months prior to the expiration date of the permit, the permittee shall conduct surveillance level testing such that acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*) and the inland silverside (*Menidia berylina*). Chronic tests shall be conducted on the inland silverside (*Menidia berylina*) and on the sea urchin (*Arbacia punctulata*). Tests shall be conducted in a different calendar quarter of each year such that tests are conducted in all four calendar quarters during the term of the permit. Beginning 12 months prior to the expiration date of the permit, the permittee shall conduct screening level testing at a frequency of 1/Quarter for four consecutive calendar quarters on the same species.

Chemical Specific

The 5/19/05 statistical evaluation indicates that twelve (12) test results for copper have a reasonable potential to exceed the acute AWQC for copper and at least one test result of (60 ug/L on 10/16/01) exceeds the acute AWQC for copper and has a reasonable potential to exceed the chronic AWQC for copper. Pursuant to Chapter 530.5 §C(2) & §C(3), this permitting action is establishing monthly average and daily maximum mass limitations. The limitations were derived as follows:

| <u>Parameter</u> | <u>Acute⁽¹⁾ Criterion</u> | <u>Acute Dilution Factor</u> | <u>Calculated EOP⁽²⁾ Acute Con.</u> | <u>Daily Max. Mass Limit</u> |
|------------------|--|----------------------------------|--|----------------------------------|
| Copper | 2.90 ug/L | 4.3:1 | 12 ug/L | 0.073 lbs/day |

Example Calculation:

$$\text{Copper} - \frac{(2.9 \text{ ug/L})(4.3)(8.34)(0.70 \text{ MGD})}{1000 \text{ ug/mg}} = 0.073 \text{ lbs/day}$$

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

| <u>Parameter</u> | <u>Chronic⁽¹⁾ Criterion</u> | <u>Chronic Dilution Factor</u> | <u>Calculated EOP⁽²⁾ Chronic Con.</u> | <u>Monthly Avg. Mass Limit</u> |
|------------------|--|------------------------------------|--|------------------------------------|
| Copper | 2.90 ug/L | 19.1:1 | 55 ug/L | 0.32 lbs/day |

Example Calculation:

$$\text{Copper} - \frac{(2.9 \text{ ug/L})(19.1)(8.34)(0.70 \text{ MGD})}{1000 \text{ ug/mg}} = 0.32 \text{ lbs/day}$$

Footnotes:

- (1) Based on EPA's 1986 ambient water quality criteria (AWQC).
- (2) End-of-pipe.

The calculations on the above are correct in that the monthly average limits are higher than the daily maximum limits. This anomaly occurs when the acute and chronic AWQC is the same, which is the case with the marine criteria for copper, but the chronic dilution factor is greater than the acute dilution factor.

Concentration limits in this permitting action are based on Department rule Chapter 523, §6(f)(2) which states that pollutants limited in terms of mass additionally may be limited in terms of other units of measurement and the permit shall require the permittee to comply with both limitations.

In addition, EPA's Technical Support Document For Water Quality Based Toxics Control, March 1991, Chapter 5, Section 5.7, recommends that permit limits for both mass and concentration be specified for effluents discharging into waters with less than 100 fold dilution to ensure attainment of water quality standards. As not to penalize the permittee for operating at flows less than the permitted flow of the waste water plant, the Department is establishing concentration limits based on a factor of 1.5 as the permittee has consistently discharge at or below 2/3rds of the monthly average permit limit of 0.70 MGD. Therefore, concentration limits for copper in this permitting action have been calculated to be:

| <u>Parameter</u> | <u>Calculated EOP Concentration</u> | <u>Monthly Avg. Conc. Limit</u> | <u>Daily Maximum Conc. Limit</u> |
|------------------|---|-------------------------------------|--------------------------------------|
| Copper | 12 ug/L | --- | 18 ug/L |
| Copper | 55 ug/L | 82 ug/L | --- |

The Department establishes testing frequencies for chemical specific parameters that exceed or have a reasonable potential to exceed critical ambient water quality thresholds taking into consideration the frequency, timing and severity of the tests results that are at issue. Due to the number of test results that have a reasonable potential to exceed the acute AWQC, the Department has made a best professional judgment to establish a monitoring frequency of 1/Quarter for copper.

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

The Department is not requiring the permittee to conduct a TRE at this time as the only data point that exceeds AWQC dates back to calendar year 2001. A review of the copper data in Attachment E of this Fact Sheet indicates the permittee has submitted 14 test results subsequent to the test result of concern that do not exceed the acute AWQC. This additional testing is considered by the Department to be sufficient information to serve as a Phase I TRE. Should future test results indicate additional exceedences of AWQC, this permit will be reopened pursuant to Special Condition L and a TRE will be required to be submitted to the Department for review and approval.

As for the remaining elements/compounds on the Department chemical specific list, there are no exceedences or reasonable potential to exceed AWQC. Therefore, beginning the effective date of the permit and lasting through permit expiration, this permitting action is establishing surveillance and screening level testing frequency of 1/Year. It is noted that for facilities in the low frequency category for chemical specific testing, surveillance level and screening level testing are both at a frequency of 1/Year. Chemical-specific testing shall be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, when applicable.

- i. 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 # W000955-44-C-R by establishing interim monthly average and daily maximum effluent concentration limits of 7.5 parts per trillion (ppt) and 11.2 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.

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 Kennebunk River to meet standards for Class SB classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the York County Coast Star newspaper on February 17, 2005. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

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

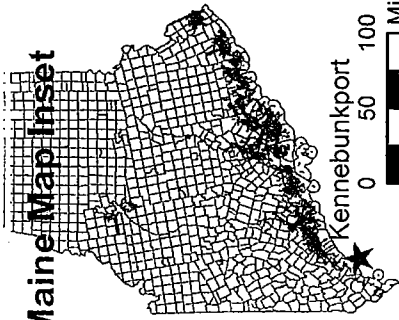
David Silver
Division of Water Resource Regulation
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-7658

10. RESPONSE TO COMMENTS

During the period between May 19, 2005 and final permit issuance, the Department accepted comments on the proposed draft permit to be issued to Kennebunkport for the proposed discharge. The Department did not receive significant comments from the permittee, state or federal agencies or interested parties that resulted in any substantive changes to the permit. Therefore, the Department has not prepared a Response to Comment section.

ATTACHMENT A

Maine Map Inset



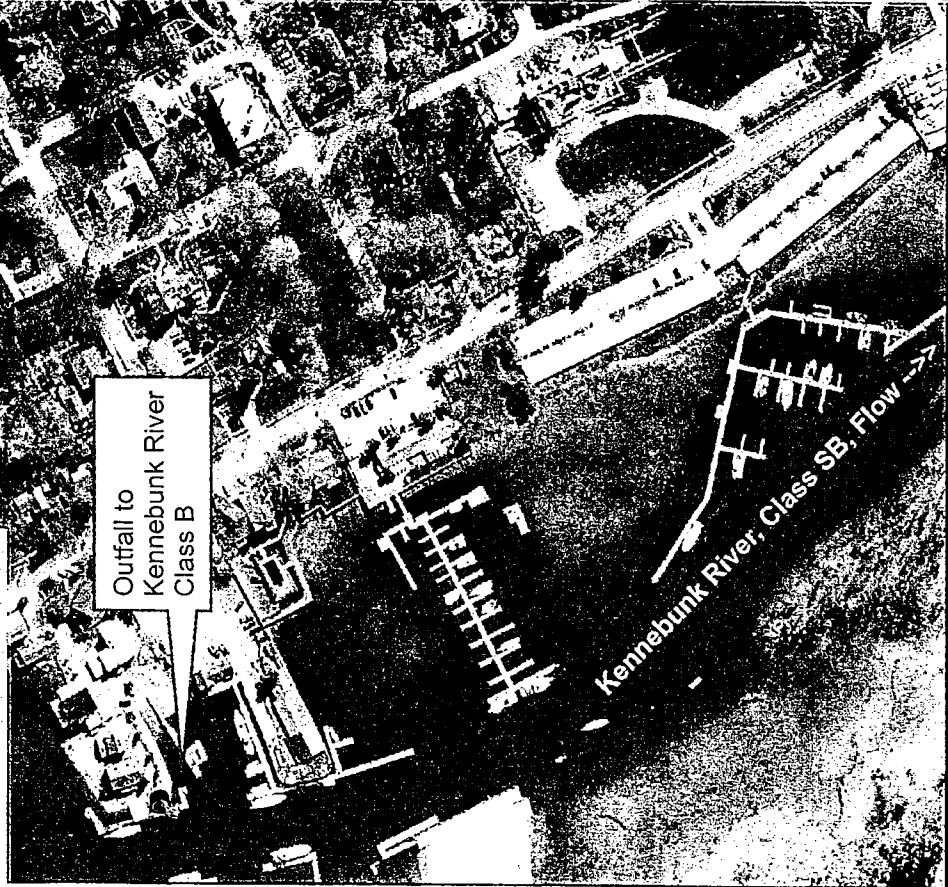
Kennebunkport POTW
Vicinity, and Outfall

ME0101184
W002626-5L-E-R
10, TMBD

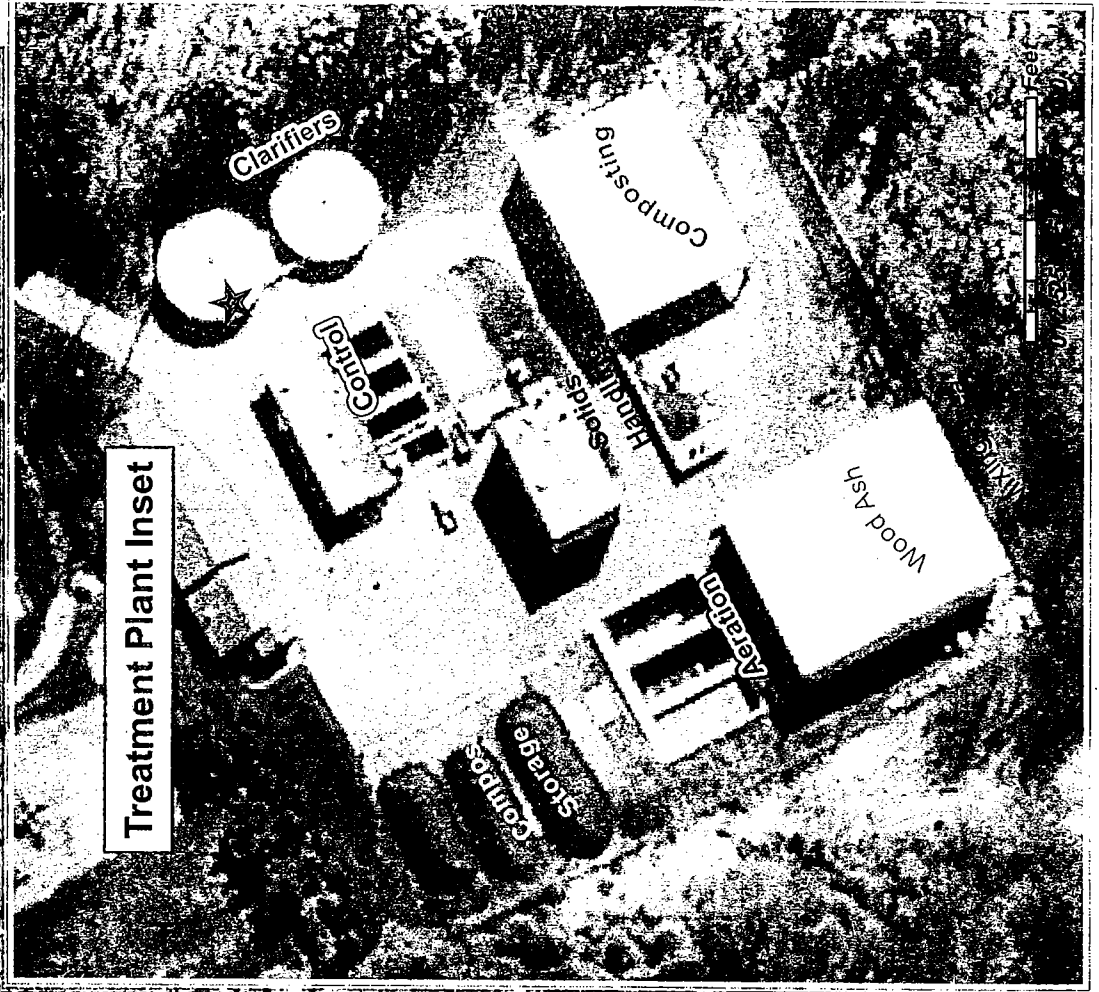
Steve Arnold, MeDEP Inspector
Allan Morr, Superintendent
603-762-2245



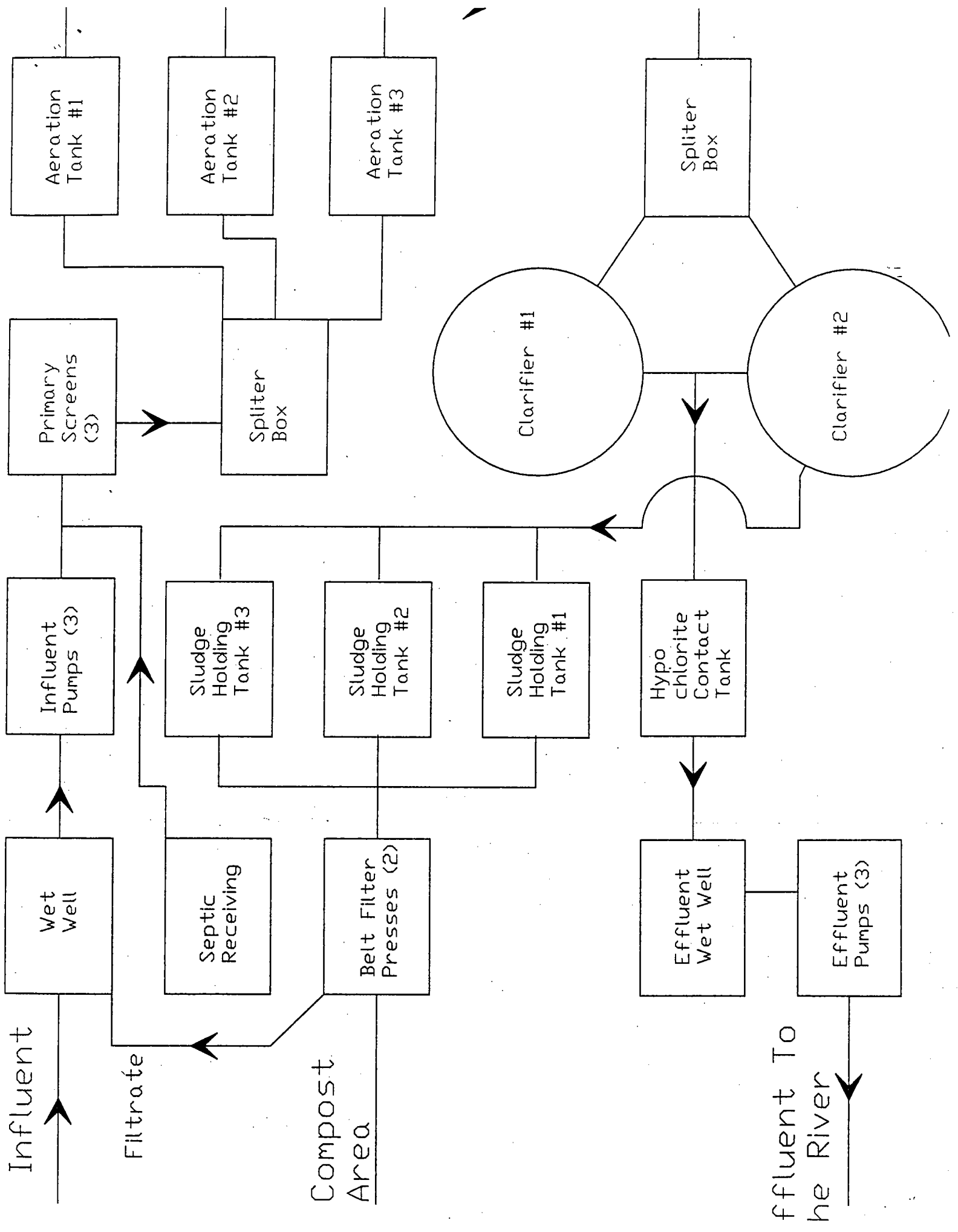
Outfall to
Kennebunk River
Class B



Treatment Plant Inset



ATTACHMENT B



ATTACHMENT C

Kennebunkport POTW Vicinity and Outfall

ME010148

W002626-5L-FR

0.7MGD

Steve Arnold, MeDEP Inspector

Allan Moir, Superintendent

#967-2245

0 0.125 0.25 0.5 Miles

Waste Water
Treatment Plant

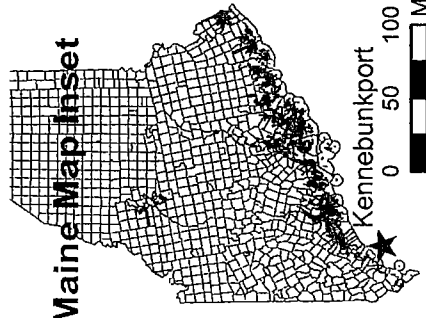
Waste Water
Outfall

Shellfish Habitat
in the River

Shellfish Harvesting
Prohibited in River
and Adjacent Ocean

Kennebunk River

Maine Map Inset



Kennebunkport

0 50 100 Miles

ATTACHMENT D

| Species | Test | Test Result % | Sample Date |
|--------------|--------|------------------|-------------|
| MYSID SHRIMP | LC50 | >100 | 01/01/1992 |
| SEA URCHIN | C_NOEL | 25 | 01/01/1992 |
| SILVER SIDE | LC50 | >100 | 01/01/1992 |
| SEA URCHIN | C_NOEL | 50 | 03/01/1992 |
| SILVER SIDE | LC50 | >100 | 03/01/1992 |
| MYSID SHRIMP | LC50 | >100 | 04/01/1992 |
| SEA URCHIN | C_NOEL | 50 | 06/01/1992 |
| SILVER SIDE | C_NOEL | 100 | 06/01/1992 |
| SILVER SIDE | LC50 | >100 | 06/01/1992 |
| MYSID SHRIMP | LC50 | 100 | 07/01/1992 |
| MYSID SHRIMP | LC50 | 100 | 10/01/1992 |
| SEA URCHIN | C_NOEL | 50 | 10/01/1992 |
| SILVER SIDE | LC50 | 100 | 10/01/1992 |
| SILVER SIDE | C_NOEL | 50 | 03/01/1993 |
| SILVER SIDE | LC50 | >100 | 03/01/1993 |
| MYSID SHRIMP | LC50 | 100 | 04/01/1993 |
| SEA URCHIN | C_NOEL | 50 | 04/01/1993 |
| MYSID SHRIMP | LC50 | 79.4 | 07/01/1993 |
| SEA URCHIN | C_NOEL | 25 | 07/01/1993 |
| SILVER SIDE | C_NOEL | 100 | 07/01/1993 |
| SILVER SIDE | LC50 | >100 | 07/01/1993 |
| SEA URCHIN | C_NOEL | 75 | 06/01/1994 |
| SILVER SIDE | A_NOEL | 76 | 06/01/1994 |
| SILVER SIDE | C_NOEL | 76 | 06/01/1994 |
| SILVER SIDE | LC50 | >76 | 06/01/1994 |
| MYSID SHRIMP | A_NOEL | 75 | 07/01/1994 |
| MYSID SHRIMP | LC50 | >74 | 07/01/1994 |
| MYSID SHRIMP | A_NOEL | 75 | 03/13/1995 |
| MYSID SHRIMP | LC50 | >75 | 03/13/1995 |
| SEA URCHIN | C_NOEL | 76 | 03/13/1995 |
| SILVER SIDE | A_NOEL | 75 | 03/13/1995 |
| SILVER SIDE | C_NOEL | 75 | 03/13/1995 |
| SILVER SIDE | LC50 | >75 | 03/13/1995 |
| MYSID SHRIMP | A_NOEL | 76 | 06/13/1995 |
| MYSID SHRIMP | LC50 | >76 | 06/13/1995 |
| SEA URCHIN | C_NOEL | 73 | 06/13/1995 |
| SILVER SIDE | A_NOEL | 78 | 06/13/1995 |
| SILVER SIDE | C_NOEL | 78 | 06/13/1995 |
| SILVER SIDE | LC50 | >78 | 06/13/1995 |
| MYSID SHRIMP | A_NOEL | 76 | 10/12/1995 |
| MYSID SHRIMP | LC50 | >76 | 10/12/1995 |

| Species | Test | Test Result % | Sample Date |
|--------------|--------|---------------|-------------|
| SEA URCHIN | C_NOEL | 72 | 10/12/1995 |
| SILVER SIDE | A_NOEL | 77 | 10/12/1995 |
| SILVER SIDE | C_NOEL | 78 | 10/12/1995 |
| SILVER SIDE | LC50 | >77 | 10/12/1995 |
| SEA URCHIN | C_NOEL | 71 | 04/15/1996 |
| SEA URCHIN | C_NOEL | 71 | 04/22/1996 |
| MYSID SHRIMP | A_NOEL | 76 | 06/09/1996 |
| MYSID SHRIMP | LC50 | >76 | 06/09/1996 |
| SEA URCHIN | C_NOEL | 72 | 06/09/1996 |
| SILVER SIDE | A_NOEL | 76 | 06/09/1996 |
| SILVER SIDE | C_NOEL | 76 | 06/09/1996 |
| SILVER SIDE | LC50 | >76 | 06/09/1996 |
| MYSID SHRIMP | A_NOEL | 77.0 | 05/04/1997 |
| MYSID SHRIMP | LC50 | >77.0 | 05/04/1997 |
| SEA URCHIN | C_NOEL | <4.6 | 05/04/1997 |
| SILVER SIDE | A_NOEL | 78.0 | 05/04/1997 |
| SILVER SIDE | C_NOEL | 78.0 | 05/04/1997 |
| SILVER SIDE | LC50 | >78.0 | 05/04/1997 |
| SEA URCHIN | C_NOEL | 71.0 | 10/29/1997 |
| MYSID SHRIMP | A_NOEL | 100 | 05/10/1998 |
| MYSID SHRIMP | LC50 | >100 | 05/10/1998 |
| SEA URCHIN | C_NOEL | 100 | 05/10/1998 |
| SILVER SIDE | A_NOEL | 100 | 05/10/1998 |
| SILVER SIDE | C_NOEL | 100 | 05/10/1998 |
| SILVER SIDE | LC50 | >100 | 05/10/1998 |
| MYSID SHRIMP | A_NOEL | 100 | 04/19/1999 |
| MYSID SHRIMP | LC50 | >100 | 04/19/1999 |
| SEA URCHIN | C_NOEL | 100 | 04/19/1999 |
| SILVER SIDE | A_NOEL | 100 | 04/19/1999 |
| SILVER SIDE | C_NOEL | 100 | 04/19/1999 |
| SILVER SIDE | LC50 | >100 | 04/19/1999 |
| MYSID SHRIMP | A_NOEL | 100.0 | 04/02/2000 |
| MYSID SHRIMP | LC50 | >100.0 | 04/02/2000 |
| SILVER SIDE | A_NOEL | 100.0 | 04/02/2000 |
| SILVER SIDE | C_NOEL | 100.0 | 04/02/2000 |
| SILVER SIDE | LC50 | >100.0 | 04/02/2000 |
| MYSID SHRIMP | A_NOEL | 100.0 | 05/06/2001 |
| MYSID SHRIMP | LC50 | >100.0 | 05/06/2001 |
| SILVER SIDE | A_NOEL | 100.0 | 05/06/2001 |
| SILVER SIDE | C_NOEL | 100.0 | 05/06/2001 |
| SILVER SIDE | LC50 | >100.0 | 05/06/2001 |

| Species | Test | Test Result % | Sample Date |
|--------------|--------|---------------|-------------|
| SEA URCHIN | C_NOEL | 100 | 10/16/2001 |
| MYSID SHRIMP | A_NOEL | 100 | 04/14/2002 |
| MYSID SHRIMP | LC50 | >100 | 04/14/2002 |
| SEA URCHIN | C_NOEL | 50 | 04/14/2002 |
| SILVER SIDE | A_NOEL | 100 | 04/14/2002 |
| SILVER SIDE | C_NOEL | 100 | 04/14/2002 |
| SILVER SIDE | LC50 | >100 | 04/14/2002 |
| MYSID SHRIMP | A_NOEL | >100 | 03/21/2004 |
| MYSID SHRIMP | LC50 | >100 | 03/21/2004 |
| SEA URCHIN | C_NOEL | 100 | 03/21/2004 |
| SILVER SIDE | A_NOEL | >100 | 03/21/2004 |
| SILVER SIDE | C_NOEL | 100 | 03/21/2004 |
| SILVER SIDE | LC50 | >100 | 03/21/2004 |
| MYSID SHRIMP | A_NOEL | >100 | 06/15/2004 |
| MYSID SHRIMP | LC50 | >100 | 06/15/2004 |
| SEA URCHIN | C_NOEL | 23.2 | 06/15/2004 |
| SILVER SIDE | A_NOEL | >100 | 06/15/2004 |
| SILVER SIDE | C_NOEL | 100 | 06/15/2004 |
| SILVER SIDE | LC50 | >100 | 06/15/2004 |
| MYSID SHRIMP | A_NOEL | >100 | 09/26/2004 |
| MYSID SHRIMP | LC50 | >100 | 09/26/2004 |
| SEA URCHIN | C_NOEL | 100 | 09/26/2004 |
| SILVER SIDE | A_NOEL | >100 | 09/26/2004 |
| SILVER SIDE | C_NOEL | 100 | 09/26/2004 |
| SILVER SIDE | LC50 | >100 | 09/26/2004 |
| MYSID SHRIMP | A_NOEL | >100 | 12/05/2004 |
| MYSID SHRIMP | LC50 | >100 | 12/05/2004 |
| SILVER SIDE | A_NOEL | >100 | 12/05/2004 |
| SILVER SIDE | C_NOEL | 100 | 12/05/2004 |
| SILVER SIDE | LC50 | >100 | 12/05/2004 |
| SILVER SIDE | A_NOEL | 100 | 02/22/2005 |

ATTACHMENT E

Sample Date: 04/02/2000

Plant flows not provided

Total Tests: 137

Missing Compounds: 1

Tests With High DL: 1

M = 1 V = 0 A = 0

BN = 0 P = 0 other = 0

Sample Date: 05/06/2001

Plant flows provided

| | | |
|---------------------|-----|--------------------|
| Total Tests: | 138 | mon. (MGD) = 0.281 |
| Missing Compounds: | 1 | day (MGD) = 0.321 |
| Tests With High DL: | 0 | |

M = 0 V = 0 A = 0

BN = 0 P = 0 other = 0

Sample Date: 04/17/2002

Plant flows provided

| | | |
|---------------------|-----|--------------------|
| Total Tests: | 124 | mon. (MGD) = 0.305 |
| Missing Compounds: | 0 | day (MGD) = 0.288 |
| Tests With High DL: | 0 | |

M = 0 V = 0 A = 0

BN = 0 P = 0 other = 0

Sample Date: 03/21/2004

Plant flows provided

| | | |
|---------------------|-----|--------------------|
| Total Tests: | 132 | mon. (MGD) = 0.183 |
| Missing Compounds: | 0 | day (MGD) = 0.239 |
| Tests With High DL: | 0 | |

M = 0 V = 0 A = 0

BN = 0 P = 0 other = 0

Sample Date: 02/22/2005

Plant flows not provided

Total Tests: 22

Tests With High DL: 0

M = 0 V = 0 A = 0

BN = 0 P = 0 other = 0

PP Data for "Hits" Only

KENNEBUNKPORT

KENNEBUNK RIVER

ARSENIC
MDL = 5 ug/l

| Conc, ug/l | MDL | Sample Date | Date Entered |
|------------|-----|-------------|--------------|
| 4.000000 | OK | 03/21/2004 | 06/14/2004 |
| 4.000000 | OK | 04/02/2000 | 05/22/2000 |
| < 1.000000 | OK | 04/17/2002 | 06/19/2002 |
| < 1.000000 | OK | 05/06/2001 | 09/06/2001 |

COPPER
MDL = 3 ug/l

| Conc, ug/l | MDL | Sample Date | Date Entered |
|---|---------------|-----------------------|-----------------------|
| 1.900000 | OK | 05/06/2001 | 11/19/2004 |
| 3.000000 | OK | 06/15/2004 | 07/28/2004 |
| 5.000000 | OK | 11/12/2003 | 01/26/2004 |
| 5.000000 | OK | 05/11/2000 | 06/12/2000 |
| 6.000000 | OK | 12/05/2004 | 01/31/2005 |
| 6.000000 | OK | 02/22/2005 | 05/02/2005 |
| 6.000000 | OK | 04/02/2000 | 05/22/2000 |
| 7.000000 | OK | 03/21/2004 | 06/14/2004 |
| <u>ACUTE RP THRESHOLD 7.3 ug/l</u> 7.000000 | OK | 04/17/2002 | 06/19/2002 |
| 8.000000 | OK | 07/22/2002 | 09/12/2003 |
| 8.000000 | OK | 11/27/2001 | 05/29/2002 |
| 8.000000 | OK | 04/02/2000 | 06/22/2000 |
| 8.000000 | OK | 05/06/2001 | 09/06/2001 |
| 9.000000 | OK | 09/26/2004 | 01/10/2005 |
| 9.000000 | OK | 10/23/2002 | 11/22/2002 |
| 9.000000 | OK | 09/30/2001 | 11/28/2001 |
| 10.000000 | OK | 02/27/2001 | 03/28/2001 |
| 10.500000 | OK | 04/14/2002 | 08/26/2003 |
| 12.000000 | OK | 03/18/2002 | 05/08/2002 |
| 12.000000 | OK | 11/05/2000 | 12/07/2000 |
| 13.000000 | OK | 06/15/2004 | 08/04/2004 |
| <u>CHRONIC RP THRESHOLD 32.4 ug/l</u> 19.000000 | OK | 09/15/2003 | 12/02/2003 |
| 60.000000 | OK | 10/16/2001 | 11/28/2001 |

CYANIDE
MDL = 5 ug/l

| Conc, ug/l | MDL | Sample Date | Date Entered |
|------------|-----|-------------|--------------|
| 3.000000 | OK | 05/06/2001 | 09/06/2001 |
| < 2.000000 | OK | 03/21/2004 | 06/14/2004 |
| < 2.000000 | OK | 04/02/2000 | 05/22/2000 |
| < 2.000000 | OK | 04/17/2002 | 06/19/2002 |