

DISCLAIMER

The full text of certain NPDES permits and the associated fact sheets has been made available to provide online access to this public information. EPA is making permits and fact sheets available electronically to provide convenient access for interested public parties and as a reference for permit writers. The ownership of these documents lies with the permitting authority, typically a State with an authorized NPDES program.

While EPA makes every effort to ensure that this web site remains current and contains the final version of the active permit, we cannot guarantee it is so. For example, there may be some delay in posting modifications made after a permit is issued. Also note that not all active permits are currently available electronically. Only permits and fact sheets for which the full text has been provided to Headquarters by the permitting authority may be made available. Headquarters has requested the full text only for permits as they are issued or reissued, beginning November 1, 2002.

Please contact the appropriate permitting authority (either a State or EPA Regional office) prior to acting on this information to ensure you have the most up-to-date permit and/or fact sheet. EPA recognizes the official version of a permit or fact sheet to be the version designated as such and appropriately stored by the respective permitting authority.

The documents are gathered from all permitting authorities, and all documents thus obtained are made available electronically, with no screening for completeness or quality. Thus, availability on the website does not constitute endorsement by EPA.

FILE



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

July 21, 2003

Mr. Ross Parker
Camden Water Pollution Control Facility
P.O. Box 1207
Camden, ME. 04843

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100137
Maine Waste Discharge License Application #W002592-5L-E-M
Final Permit/License Modification/Renewal

Dear Mr. Parker:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **modification/renewal** which was approved by the Department of Environmental Protection. Please read the permit/license 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 287-7693.

Sincerely,

Gregg Wood
Division of Water Resource Regulation
Bureau of Land and Water Quality

Enc.

cc: Denise Behr, DEP/CMRO
~~Ted ...~~

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

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.

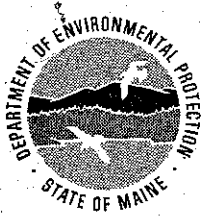
This can create a lag between the time your new permit becomes effective and the new permit limits appearing on your DMRs. If you are faced with this, it can create three different situations that have to be dealt with in different ways.

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.

Phil Garwood



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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF CAMDEN)	MAINE POLLUTANT DISCHARGE
PUBLICLY OWNED TREATMENT WORKS)	ELIMINATION SYSTEM PERMIT
CAMDEN, KNOX COUNTY, MAINE)	AND
ME0100137)	WASTE DISCHARGE LICENSE
W002592-5L-E-M APPROVAL)	MODIFICATION/RENEWAL

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 (the Department) has considered the application of the TOWN OF CAMDEN (Town), with its supportive data, agency review comments, and other related material on file and finds the following facts:

APPLICATION SUMMARY

The applicant has applied to the Department for modification of Department Waste Discharge License (WDL) #W002592-5L-D-R which was issued on September 28, 1999 and is due to expire on September 28, 2004. The 9/28/99 WDL authorized the discharge of up to a monthly average flow of 1.21 million gallons per day (MGD) of secondary treated sanitary waste waters from a publicly owned treatment works facility to the Camden Harbor, Class SB, in Camden, Maine.

On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine. From this point forward, the program will be referenced as the Maine Pollutant Discharge Elimination System (MEPDES) permit program and permit #ME0100137 (same as NPDES permit number) will be utilized as the primary reference number.

MODIFICATIONS REQUESTED

The permittee has requested the Department incorporate the terms and conditions of the MEPDES permitting program as the NPDES permit last issued by the USEPA on September 26, 1997, contains a number of limitations and monitoring requirements associated with tannery waste waters that are no longer received at the Town's waste water treatment facility.

It is noted the Department is processing the application as a combination modification/renewal due to the relatively short time frame between issuance of this modification and the expiration date of the previous licensing action (September 2004) and the effort involved in processing the modification.

PERMIT SUMMARY

This permitting action is carrying forward all the terms and conditions of the 9/28/99 WDL action with the following exceptions:

1. Eliminating the monthly average and daily maximum water quality based mass and concentration limits for cyanide.
2. Eliminating the whole effluent toxicity (WET) limit for the sea urchin (*Arbacia punctulata*).
3. Establishing daily maximum water quality based mass and concentration limits for copper and requiring the submission of a toxicity reduction evaluation (TRE).
4. Requiring the permittee to develop a Wet Weather Management Plan for the waste water treatment facility.
5. Requiring the permittee to annually review and or update the Operations and Maintenance (O&M) manual for the treatment facility and appurtenant facilities.
6. Requiring the town to make provisions to monitor five pump stations to determine the frequency and quantity (via measurement or estimation) of waste water discharged from the bypass structures. The permit requires the town to install a flow estimation system at the Bay View Street pump station as part of the pump station upgrade.
7. Incorporating the terms and conditions of the federal pretreatment program as previously required via the 9/30/97 NPDES permit.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated June 18, 2003 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 MRSa 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. Where a discharge will result in lowering the existing 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 application of the TOWN OF CAMDEN, to discharge up to a monthly average flow of 1.21 million gallons per day of secondary treated sanitary waste waters to Camden Harbor, Class SB, subject to the attached conditions and all applicable standards and regulations:

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 expires five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 18th DAY OF July, 2003.

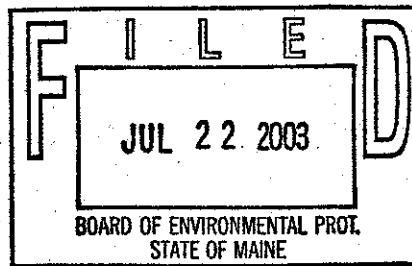
COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY: *Dawn E. Gallagher*
Dawn Gallagher, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application May 1, 2003

Date of application acceptance May 5, 2003



Date filed with Board of Environmental Protection _____

This Order prepared by GREGG WOOD, BUREAU OF LAND & WATER QUALITY
W259251e 7/10/03

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date of the permit and lasting through permit expiration, the permittee is authorized to discharge secondary treated sanitary waste waters from **OUTFALL #001** to the Camden Harbor. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic

Discharge Limitations

Monitoring Requirements

	<u>Monthly Average</u> lb/day	<u>Weekly Average</u> lb/day	<u>Daily Maximum</u> lb/day	<u>Monthly Average</u> as specified	<u>Weekly Average</u> as specified	<u>Daily Maximum</u> as specified	<u>Measurement Frequency</u> as specified	<u>Sample Type</u> as specified
Flow [50050]	1.21 MGD [03]	---	Report MGD [03]	---	---	---	Continuous [99/99]	Recorder [RC]
Biochemical Oxygen Demand (BOD ₅) [00310]	303 #/day [26]	454 #/day [26]	505 #/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Week [02/07]	Composite [24]
BOD ₅ % Removal ⁽¹⁾ [81010]	---	---	---	85% [19]	---	---	1/Month [01/30]	Calculate [CA]
Total Suspended Solids [00530]	303 #/day [26]	454 #/day [26]	505 #/day [26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Week [02/07]	Composite [24]
TSS % Removal ⁽¹⁾ [81011]	---	---	---	85% [19]	---	---	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	1/Day [01/01]	Grab [GR]
Fecal Coliform Bacteria (May 15 – September 30) [31616]	---	---	---	15/100 ml ⁽²⁾ [13]	---	50/100 ml [13]	2/Week [02/07]	Grab [GR]
Total Residual Chlorine (May 15 – September 30) [50060]	---	---	---	0.1 mg/L [19]	---	0.3 mg/L [19]	1/Day [01/01]	Grab [GR]

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – OUTFALL #001 (cont'd)

Effluent Characteristic	Discharge Limitations			Monitoring Requirements				
	Monthly Average lb/day	Weekly Average lb/day	Daily Maximum lb/day	Monthly Average as specified	Weekly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Copper (Total) <small>[01042]</small>	---	---	0.79 #/Day <small>[26]</small>	---	---	124 ug/L <small>[19]</small>	1/Year <small>[01/YR]</small>	Composite <small>[24]</small>
pH (Std. Unit) <small>[00400]</small>	---	---	---	---	---	6.0 – 9.0 <small>[12]</small>	1/Day <small>[01/01]</small>	Grab <small>(GR)</small>

**SCREENING LEVEL – Beginning September 2003 and lasting through September 2004 and
Beginning twelve months prior to permit expiration and lasting through permit expiration**

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity(3) Acute – NOEL <i>Mysidopsis bahia</i> <small>[TDM3E]</small> (Mysid Shrimp)	---	---	---	Report % <small>[23]</small>	2/Year <small>[02/YR]</small>	Composite <small>[24]</small>
<i>Menidia beryllina</i> <small>[TDM6B]</small> (Inland Silverside)	---	---	---	Report % <small>[23]</small>	2/Year <small>[02/YR]</small>	Composite <small>[24]</small>
Chronic – NOEL <i>Menidia beryllina</i> <small>[TBP6B]</small> (Inland Silverside)	---	---	---	Report % <small>[23]</small>	2/Year <small>[02/YR]</small>	Composite <small>[24]</small>
<i>Arbacia punctulata</i> <small>[TBH3A]</small> (Sea urchin)	---	---	---	Report % <small>[23]</small>	2/Year <small>[02/YR]</small>	Composite <small>[24]</small>
Chemical Specific (4) <small>[50008]</small>	---	---	---	Report ug/L <small>[28]</small>	1/Quarter <small>[01/90]</small>	Composite/Grab <small>[24]</small>

SPECIAL CONDITIONS

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

Footnotes:

Sampling – Sampling for all parameters (with the exception of total residual chlorine and fecal coliform bacteria) is to be conducted after the parshall flume. Seasonal sampling for total residual chlorine and fecal coliform bacteria is to be conducted at the last manhole in the discharge line located in the town parking area adjacent to the harbor. 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, 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.

1. **Percent Removal** - The treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand for all flows receiving secondary treatment. The percent removal shall be based on monthly average influent and effluent concentration values. The percent removal shall be waived when the monthly average influent concentration is less than 200 mg/L. When this occurs, the permittee shall report a "NODI-9" code in the applicable space on the monthly DMR.
2. **Fecal coliform bacteria** – The monthly average limitation is a geometric mean limitation and results shall be calculated and reported as such.
3. **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 dilution of 3.7% and 2.0% 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.

Between September 2003 and September 2004 and again beginning twelve months prior to the expiration date of the permit, the permittee shall conduct screening level WET testing at a frequency of 2/Year. 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 reported to the Department within 30 days of the permittee receiving the test results from the laboratory conducting the testing.

The permittee is also required to analyze the effluent for the parameters specified in the analytic chemistry on the form in Attachment A of this permit every time a WET test is performed.

SPECIAL CONDITIONS

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

Footnotes:

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, 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.
4. **Priority pollutant** - (chemical specific testing pursuant to Department rule Chapter 530.5) testing are those parameters listed by the USEPA pursuant to Section 307(a) of the Clean Water Act and published a 40 CFR Part 122, Appendix D, Tables II and III.

Between September 2003 and September 2004 and again beginning twelve months prior to the expiration date of the permit, screening level chemical specific testing shall be conducted at a frequency of four per year (four consecutive calendar quarters). Chemical specific testing shall be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, where 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 a means of disinfection, an approved chlorine contact structure providing the proper detention time consistent with good engineering practice must be utilized, followed by a dechlorination system if the Total Residual Chlorine (TRC) cannot be met by dissipation in the detention tank. The total residual chlorine in the effluent shall at no time cause any demonstrable harm to aquatic life in the receiving waters. The dose of chlorine applied shall be sufficient to leave a TRC concentration that will effectively reduce bacteria to levels below those specified in Special Condition A, "*Effluent Limitations and Monitoring Requirements*", above.

D. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a **Grade III**, certificate pursuant to Title 32 M.R.S.A., Section 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. 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.

SPECIAL CONDITIONS

F. 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. The DMR's shall be **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to a Department Regional Office such that the DMR's are received by the Department on or before the fifteenth (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
Central Maine Regional Office
Bureau of Land and Water Quality
Division of Compliance, Engineering & Technical Assistance
State House Station #17
Augusta, Maine 04333

G. 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 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 waste water introduced to the waste water collection and treatment system; and
 - (b) any anticipated impact caused by the change in the quantity or quality of the waste water to be discharged from the treatment system.

H. TOXICITY REDUCTION EVALUATION (TRE)

Within thirty (30) days of the effective date of this permit, (PCS Code 001PA) the permittee shall submit to the Department for review and approval, a TRE plan which outlines a strategy to identify the source(s) and action items to be implemented to mitigate or eliminate exceedence of the acute ambient water quality criteria for copper.

SPECIAL CONDITIONS

I. 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 waste water from any other point source are not authorized under this permit, but shall be reported in accordance with Standard Condition B(5) (Bypass) of this permit.

J. PUMP STATION EMERGENCY BYPASSES

Discharges from emergency bypass structures in pump stations are not authorized by this permit. The permittee shall make provisions to monitor the pump stations listed below to determine the frequency and quantity (via measurement or estimation) of waste water discharged from the bypass structures. To determine quantity from the Bay View Street pump station, the permittee shall install an electronic flow estimation system to record frequency, duration and estimation of flow discharged.

<u>Outfall Number</u>	<u>Outfall Location</u>	<u>Receiving Water and Class</u>
002	Bay View Street	Camden Harbor, SB
003	Rawson Avenue	Megunticook River, B
004	Sea Street	Camden Harbor, SB
005	Mount Battie	Megunticook River, B
006	Latie Beach	Camden Harbor, SB

Discharges from the pump stations shall be reported in accordance with Standard Condition B(5) (Bypass) of this permit.

K. DISPOSAL OF SEPTAGE WASTE IN WASTE WATER TREATMENT FACILITY

During the effective period of this permit, the permittee is authorized to receive and treat up to **1,500 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 the addition of septage cause or contribute to effluent quality violations. If such conditions do exist, the introduction of septage into the treatment process or solids handling stream 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 water treatment influent and test results.

SPECIAL CONDITIONS

K. DISPOSAL OF SEPTAGE WASTE IN WASTE WATER TREATMENT FACILITY

4. The addition of septage into the treatment process or solids handling stream shall not cause the treatment facilities design capacity to be exceeded. If, for any reason, the treatment process or solids handling facilities become overloaded, introduction of septage into the treatment process or solids handling stream 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 but should be reported in the treatment facility's influent flow.

L. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff shall develop and maintain a Wet Weather 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.

On or before September 1, 2003, (PCS Code 06799) the permittee shall submit to the Department for review and approval, a new or revised Wet Weather Management Plan which conforms to Department guidelines for such plans. The revised plan 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.

M. OPERATION & MAINTENANCE (O&M) PLAN

This facility shall have a current written comprehensive Operation & Maintenance (O&M) Plan. The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. The O&M Plan shall be kept on-site at all times and made available to Department and EPA personnel upon request.

SPECIAL CONDITIONS

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

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 waste water treatment facility to ensure that it is up-to-date.

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

N. CHAPTER 530.5(B)(7)(c)(iii) CERTIFICATION

By December 31 of each calendar year (*PCS Code 030MS*), the permittee shall provide the Department with a certification describing any of the following that have occurred since the effective date of this permit:

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.

O. 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 monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

SPECIAL CONDITIONS

P. INDUSTRIAL PRETREATMENT PROGRAM

1. Pollutants introduced into POTW's by a non-domestic source (user) shall not pass-through the publicly owned treatment works (POTW) or interfere with the operation or performance of the works.
 - a. The permittee shall develop and enforce specific effluent limits (local limits) for Industrial User(s), and all other users, as appropriate, which together with appropriate changes in the POTW facilities or operation, are necessary to ensure continued compliance with the POTW's MEPDES permit or sludge use or disposal practices. Specific local limits shall not be developed and enforced without individual notice to persons or groups who have requested such notice and an opportunity to respond.

Within 180 days of the effective date of this permit, (PCS Code 08799), the permittee shall prepare and submit a written technical evaluation to the Department analyzing the need to revise local limits. As part of this evaluation, the permittee shall assess how the POTW performs with respect to influent and effluent of pollutants, water quality concerns, sludge quality, sludge processing concerns/inhibition, bio-monitoring results, activated sludge inhibition, worker health and safety and collection system concerns. In preparing this evaluation, the permittee shall complete the attached form (Attachment B of this permit) with the technical evaluation to assist in determining whether existing local limits need to be revised. Justifications and conclusions should be based on actual plant data if available and should be included in the report. Should the evaluation reveal the need to revise local limits, the permittee shall complete the revisions within 120 days of notification by the Department and submit the revisions to the Department for approval. The permittee shall carry out the local limits revisions in accordance with EPA's Guidance Manual for the Development and Implementation of Local Discharge Limitations Under the Pretreatment Program (December, 1987).

2. The permittee shall implement the Industrial Pretreatment Program in accordance with the legal authorities, policies, procedures, and financial provisions described in the permittee's approved Pretreatment Program, and the General Pretreatment Regulations, found at 40 CFR 403 and Department rule Chapter 528. At a minimum, the permittee must perform the following duties to properly implement the Industrial Pretreatment Program (IPP):
 - a. Carry out inspection, surveillance, and monitoring procedures which will determine, independent of information supplied by the industrial user, whether the industrial user is in compliance with the Pretreatment Standards. At a minimum, all significant industrial users shall be sampled and inspected at the frequency established in the approved IPP but in no case less than once per year and maintain adequate records.

SPECIAL CONDITIONS

P. INDUSTRIAL PRETREATMENT PROGRAM (cont'd)

- b. Issue or renew all necessary industrial user control mechanisms within 90 days of their expiration date or within 180 days after the industry has been determined to be a significant industrial user.
- c. Obtain appropriate remedies for noncompliance by an industrial user with any pretreatment standard and/or requirement.
- d. Maintain an adequate revenue structure for continued implementation of the Pretreatment Program.
- e. The permittee shall provide the Department with an annual report describing the permittee's pretreatment program activities for the twelve month period ending 60 days prior to the due date in accordance with federal regulation found at 40 CFR 403.12(i) and Department rule Chapter 528(12)(I). The **annual report** shall be consistent with the format described in Attachment C of this permit **and shall be submitted no later than June 1st of each calendar year.** (PCS Code 61012)
- f. The permittee must obtain approval from the Department prior to making any significant changes to the industrial pretreatment program in accordance with federal regulation found at 40 CFR 403.18(c) and Department rule Chapter 528(18).
- g. The permittee must assure that applicable National Categorical Pretreatment Standards are met by all categorical industrial users of the POTW. These standards are published in the federal regulations found at 40 CFR 405 et. seq.
- h. The permittee must modify its pretreatment program to conform to all changes in the federal regulations and State rules that pertain to the implementation and enforcement of the industrial pretreatment program. **Within 180 days of the effective date of this permit,** (PCS Code 50999), the permittee must provide the Department in writing, proposed changes (if applicable) to the permittee's pretreatment program deemed necessary to assure conformity with current federal regulations and State rules. At a minimum, the permittee must address in its written submission the following areas: (1) Enforcement response plan; (2) revised sewer use ordinances; and (3) slug control evaluations. The permittee will implement these proposed changes pending the Department's approval under federal regulation 40 CFR 403.18 and Department rule Chapter 528(18). This submission is separate and distinct from any local limits analysis submission described in section I(a) above.

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 _____
 Decchlorinated? _____

Results _____ % effluent _____ DEP/EPA Test required by: _____

	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)
QC standard	% survival >90	% fertilized >70	% survival >90	C>80
lab control				>0.50
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			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. _____

ATTACHMENT B

RE-ASSESSMENT OF TECHNICALLY BASED INDUSTRIAL DISCHARGE LIMITS

Pursuant to federal regulation 40 CFR §122.21(j)(4) and Department rule Chapter 528, all Publicly Owned Treatment Works (POTWs) with approved Industrial Pretreatment Programs (IPPs) shall provide the Department with a written evaluation of the need to revise local industrial discharge limits under federal regulation 40 CFR §403.5(c)(1) and Department rule Chapter 528(6).

Below is a form designed by the U.S. Environmental Protection Agency (EPA - New England) to assist POTWs with approved IPPs in evaluating whether their existing Technically Based Local Limits (TBLLs) need to be recalculated. The form allows the permittee and Department to evaluate and compare pertinent information used in previous TBLLs calculations against present conditions at the POTW.

Please read the directions below before filling out the attached form.

ITEM I.

- * In Column (1), list what your POTW's influent flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present influent flow rate. Your current flow rate should be calculated using the POTW's average daily flow rate from the previous 12 months.
- * In Column (1) list what your POTW's SIU flow rate was when your existing TBLLs were calculated. In Column (2), list your POTW's present SIU flow rate.
- * In Column (1), list what dilution ratio and/or 7Q10 value was used in your previous NPDES permit. In Column (2), list what dilution ratio and/or 7Q10 value is presently being used in your new/reissued MEPDES permit.

The 7Q10 value is the lowest seven day average flow rate, in the river, over a ten year period. The 7Q10 value and/or dilution ratio used by the Department in your MEPDES permit can be found in your MEPDES permit "Fact Sheet."

- * In Column (1), list the safety factor, if any, that was used when your existing TBLLs were calculated.
- * In Column (1), note how your bio-solids were managed when your existing TBLLs were calculated. In Column (2), note how your POTW is presently disposing of its biosolids and how your POTW will be disposing of its biosolids in the future.

ITEM II.

- * List what your existing TBLLs are - as they appear in your current Sewer Use Ordinance (SUO).

ITEM III.

- * Identify how your existing TBLLs are allocated out to your industrial community. Some pollutants may be allocated differently than others, if so please explain.

ITEM IV.

- * Since your existing TBLLs were calculated, identify the following in detail:
 - (1) if your POTW has experienced any upsets, inhibition, interference or pass-through as a result of an industrial discharge.
 - (2) if your POTW is presently violating any of its current MEPDES permit limitations - include toxicity.

ITEM V.

- * Using current sampling data, list in Column (1) the average and maximum amount of pollutants (in pounds per day) received in the POTW's influent. Current sampling data is defined as data obtained over the last 24 month period.

All influent data collected and analyzed must be in accordance with federal regulation 40 CFR §136. Sampling data collected should be analyzed using the lowest possible detection method(s), e.g. graphite furnace.

- * Based on your existing TBLLs, as presented in Item II., list in Column (2) each Maximum Allowable Industrial Headworks Loading (MAIHL) value corresponding to each of the local limits derived from an applicable environmental criteria or standard, e.g. water quality, sludge, MEPDES, inhibition, etc. For each pollutant, the MAIHL equals the calculated Maximum Allowable Headwork Loading (MAHL) minus the POTW's domestic loading source(s). For more information, please see p.,3-28 in EPA's *Guidance Manual on the Development and Implementation of Local Limits Under the Pretreatment Program, 12/87.*

ITEM VI.

- * Using current sampling data, list in Column (1) the average and maximum amount of pollutants (in micrograms per liter) present your POTW's effluent. Current sampling data is defined as data obtained during the last 24 month period.

All effluent data collected and analyzed must be in accordance with federal regulation 40 CFR §136. Sampling data collected should be analyzed using the lowest possible detection method(s), e.g. graphite furnace.

- * List in Column (2A) what the Water Quality Standards (WQS) were (in micrograms per liter) when your TBLLs were calculated, please note what hardness value was used at that time. Hardness should be expressed in milligram per liter of Calcium Carbonate.

List in Column (2B) the current WQSs or "Chronic Gold Book" values for each pollutant multiplied by the dilution ratio used in your new/reissued MEPDES permit. For example, with a dilution ratio of 25:1 at a hardness of 20 mg/l - Calcium Carbonate (copper's chronic WQS equals 2.99 ug/l) the chronic MEPDES permit limit for copper would equal 75 ug/l.

ITEM VII.

- * In Column (1), list all pollutants (in micrograms per liter) limited in your new/reissued MEPDES permit. In Column (2), list all pollutants limited in your old/expired NPDES permit.

ITEM VIII.

- * Using current sampling data, list in Column (1) the average and maximum amount of pollutants in your POTW's biosolids. Current data is defined as data obtained during the last 24 month period. Results are to be expressed as total dry weight.

All biosolids data collected and analyzed must be in accordance with federal 40 CFR §136.

In Column (2A), list current State and/or Federal sludge standards that your facility's biosolids must comply with. Also note how your POTW currently manages the disposal of its biosolids. If your POTW is planing on managing its biosolids differently, list in Column (2B) what your new biosolids criteria will be and method of disposal.

In general, please be sure the units reported are correct and all pertinent information is included in your evaluation. If you have any questions, please contact your pretreatment representative at the Maine Department of Environmental Protection, Bureau of Land & Water Quality, Division of Engineering, Compliance & Technical Assistance, State House Station #17, Augusta, ME. 04333. The telephone number is (207) 287-3901.

**REASSESSMENT OF TECHNICALLY BASED LOCAL LIMITS
(TBLLs)**

POTW Name & Address : _____

MEPDES PERMIT # _____

Date the Department approved current TBLLs : _____

Date the Department approved current Sewer Use Ordinance : _____

ITEM I.

In Column (1) list the conditions that existed when your current TBLLs were calculated. In Column (2), list current conditions or expected conditions at your POTW.

	Column (1)	Column (2)
	<u>EXISTING TBLLs</u>	<u>PRESENT CONDITIONS</u>
POTW Flow (MGD)	_____	_____
SIU Flow (MGD)	_____	_____
Dilution Ratio or 7Q10 from the MEPDES Permit	_____	_____
Safety Factor	_____	N/A
Biosolids Disposal Method(s)	_____	_____

ITEM II.

EXISTING TBLLs

<u>POLLUTANT</u>	<u>NUMERICAL LIMIT</u> (mg/l) or (lb/day)	<u>POLLUTANT</u>	<u>NUMERICAL LIMIT</u> (mg/l) or (lb/day)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

ITEM III.

Note how your existing TBLLs, listed in Item II., are allocated to your Significant Industrial Users (SIUs), i.e. uniform concentration, contributory flow, mass proportioning, other. Please specify by circling.

ITEM IV.

Has your POTW experienced any upsets, inhibition, interference or pass-through from industrial sources since your existing TBLLs were calculated?

If yes, explain. _____

Has your POTW violated any of its MEPDES permit limits and/or toxicity test requirements?

If yes, explain. _____

ITEM V.

Using current POTW influent sampling data fill in Column (1). In Column (2), list your Maximum Allowable Industrial Headwork Loading (MAIHL) values used to derive your TBLLs listed in Item II. In addition, please note the environmental criteria for which each MAIHL value was established, i.e. water quality, sludge, MEPDES etc.

<u>Pollutant</u>	<u>Column (1)</u>		<u>Column (2)</u>	<u>Criteria</u>
	<u>Influent Data Analyses</u>		<u>MAIHL Values</u>	
	<u>Maximum</u> (lb/day)	<u>Average</u> (lb/day)	(lb/day)	
Arsenic	_____	_____	_____	_____
Cadmium	_____	_____	_____	_____
Chromium	_____	_____	_____	_____
Copper	_____	_____	_____	_____
Cyanide	_____	_____	_____	_____
Lead	_____	_____	_____	_____
Mercury	_____	_____	_____	_____
Nickel	_____	_____	_____	_____
Silver	_____	_____	_____	_____
Zinc	_____	_____	_____	_____
Other (List)	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

ITEM VI.

Using current POTW effluent sampling data, fill in Column (1). In Column (2A) list what the Water Quality Standards (Gold Book Criteria) were at the time your existing TBLLs were developed. List in Column (2B) current Gold Book values multiplied by the dilution ratio used in your new/reissued MEPDES permit.

<u>Pollutant</u>	Column (1)		Columns	
	Effluent Data Analyses		(2A)	(2B)
	<u>Maximum</u>	<u>Average</u>	Water Quality Criteria (Gold Book)	Today
	(ug/l)	(ug/l)	<u>From TBLLs</u> (ug/l)	(ug/l)
Arsenic	_____	_____	_____	_____
Cadmium*	_____	_____	_____	_____
Chromium*	_____	_____	_____	_____
Copper*	_____	_____	_____	_____
Cyanide	_____	_____	_____	_____
Lead*	_____	_____	_____	_____
Mercury	_____	_____	_____	_____
Nickel*	_____	_____	_____	_____
Silver	_____	_____	_____	_____
Zinc*	_____	_____	_____	_____
Other (List)	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____
	_____	_____	_____	_____

*Hardness Dependent (mg/l - CaCO3)

ITEM VII.

In Column (1), identify all pollutants limited in your new/reissued MEPDES permit. In Column (2), identify all pollutants that were limited in your old/expired NPDES permit.

Column (1) NEW PERMIT		Column (2) OLD PERMIT	
<u>Pollutants</u>	<u>Limitations (ug/l)</u>	<u>Pollutants</u>	<u>Limitations (ug/l)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

ITEM VIII.

Using current POTW biosolids data, fill in Column (1). In Column (2A), list the biosolids criteria that was used at the time your existing TBLLs were calculated. If your POTW is planing on managing its biosolids differently, list in Column (2B) what your new biosolids criteria would be and method of disposal.

<u>Pollutant</u>	Column (1)	Columns	
	Biosolids Data Analyses <u>Average</u> (mg/kg)	(2A) Biosolids Criteria From TBLLs (mg/kg)	(2B) New (mg/kg)
Arsenic	_____	_____	_____
Cadmium	_____	_____	_____
Chromium	_____	_____	_____
Copper	_____	_____	_____
Cyanide	_____	_____	_____
Lead	_____	_____	_____
Mercury	_____	_____	_____
Nickel	_____	_____	_____
Silver	_____	_____	_____
Zinc	_____	_____	_____
Molybdenum	_____	_____	_____
Selenium	_____	_____	_____
Other (List)	_____	_____	_____

ATTACHMENT C

MEPDES PERMIT REQUIREMENT FOR INDUSTRIAL PRETREATMENT ANNUAL REPORT

1. A narrative description (paragraph) of program effectiveness including the following:

- present and proposed changes to the program
- Funding
- Staffing
- Ordinances
- Regulations
- Statutory authority
- Other

Our pretreatment program is very effective as indicated by the SIU compliance rate and the reduction in pollutant loading to the POTW.

The program is adequately funded and staffed to provide for annual training and completion of our regulatory responsibilities.

No changes have been made, or are proposed, to the Town of Camden's Sewer Use Ordinance. The SUO provides adequate statutory authority to enforce in Local, State and Federal courts.

2. The date of the latest adoption of Local Limits and a statement as to whether the municipality is under a State or Federal compliance schedule that includes steps to be taken to revise Local Limits.

If yes, Compliance Schedule; if no, schedule not needed.

_____ 's Local Limits were last adopted (by local authority) on _____ and _____ is under no State or Federal compliance schedule that includes steps to be taken to revise Local Limits.

3. A description of actions taken to reduce the incidence of violations by SIU's;

A. Example: Inspections – Notifications – Information/Education

4. A description of monitoring, sewer inspections and evaluations which were done during the past year to detect Interference and Pass Through, specifying parameters and frequencies;

Example: Evaluations/investigations as a result of Monitoring, Sewer Inspections, and Evaluations, Influent – Effluent results, Spills, Dumps, Toxicity, or Unusual events.

5. A detailed description of all Interference and Pass Through that occurred during the past year; [statement of:

Event, Parameter, Violation, Cause, IU, POTW action, IU action, Result (see NOV #)].

_____ experienced no events of Interference or Pass- Through in this reporting period. If "Yes" then describe.

6. A thorough description of all investigations into Interference and Pass-Through during the past year;

A paragraph: Violation, Problem, Steps to resolve, Result.

(same as #5 or describe investigations.)

7. An updated list of all industrial users by category (40 CFR 403.8(f)(2)(i), indicating compliance or non- compliance with the following:

- baseline monitoring reporting requirements for newly promulgated industries
- compliance status reporting requirements for newly promulgated industries
- periodic (semi-annual) monitoring reporting requirements - categorical standards, and
- local limits

Example:

SIU	New Promulgated BMR/Compliance (Y/N) (Y/N)	Cat Limits Compliance (Y/N)	Local Limits Compliance (Y/N)	Semi-annual Reports Compliance (Y/N)
-----	--	-----------------------------	-------------------------------	--------------------------------------

8. A summary of compliance and enforcement activities during the preceding year including a:

- list of SIU's inspected by the POTW (dates, compliance status),
- list of SIU's sampled by the POTW (dates, compliance status),

Example:

SIU	Inspected	Sampled/self Sampled/POTW	Compliance Y/N
-----	-----------	---------------------------	----------------

- list of SIU's to which compliance schedules were issued, [SIU] - Violation - Compliance - Schedule

N/A or schedule plus Progress Reporting Dates]

- summary list of NOV's written to SIU's by name [statement],
- summary list of AO's written to SIU's by name [statement],
- list of criminal and/or civil suits filed by SIU,[usually a simple statement]
- list of penalty amounts obtained (by SIU) [a statement].

9. NOTE: Some items in numbers 9 & 10 may be combined in a chart, or charts. Be sure that any charts are logical, not cluttered, and don't contain an unreasonable amount of information. Any violations should be shown separately, in summary, for each item.

List of violating industries required to be published in a local newspaper (40 CFR 403.8(f)(2)(vii). [Statement]

10. A summary of all pollutant analytical results for:

- Influent [Annual average – show violations]
- Effluent [Annual average – show violations]
- Sludge [Annual average– show violations]
- Toxicity/Bioassay [Annual Average – show violations]

- comparison of influent sampling results versus threshold inhibitory concentrations for the POTW's wastewater treatment system.

- comparison of effluent sampling results versus water quality standards, considering the permitted dilution factor of the POTW.

NOTE: The sampling program shall be as described below OR any similar sampling program described in the MEPDES permit.

- At a minimum, annual sampling and analysis of/ the influent and effluent of the POTW's wastewater treatment plant shall be conducted on the following pollutants:

Example:

Influent	Inhibition Effluent	AWC
		Acute Chronic
- Total Cadmium		
- Total Chromium		
- Total Copper		
- Total Lead		
- Total Mercury (Methods 1669 & 1631)		
- Total Nickel		
- Total Silver		
- Total Zinc		
- Total Cyanide		
- Total Arsenic		

The sampling program shall consist of one 24-hour flow-proportioned composite that is representative of the flow received by the POTW. The composite shall consist of accurately flow-proportioned grab samples taken over a discharge day if the samples are collected manually, or shall consist of a minimum of 48 accurately flow-proportioned samples if an automatic sampler is used. Sampling and preservation shall be according to 40 CFR part 136.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: **June 18, 2003**

PERMIT NUMBER: **ME0100137**

LICENSE NUMBER: **W002592-5L-E-M**

NAME AND ADDRESS OF APPLICANT:

**Town of Camden
P.O. Box 1207
Camden, ME. 04843**

COUNTY: **Knox County**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

**10 Lions Lane
Camden, ME. 04843**

RECEIVING WATER(S)/CLASSIFICATION: **Camden Harbor/Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Ross Parker
(207) 236-7955**

1. APPLICATION SUMMARY

Application: The applicant has applied to the Department for modification of Department Waste Discharge License (WDL) #W002592-5L-D-R which was issued on September 28, 1999 and is due to expire on September 28, 2004. The 9/28/99 WDL authorized the discharge of up to a monthly average flow of 1.21 million gallons per day (MGD) of secondary treated sanitary waste waters from a publicly owned treatment works facility to the Camden Harbor, Class SB, in Camden, Maine.

2. PERMIT SUMMARY

- a. Regulatory: On January 12, 2001, the Department received authorization from the U. S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting program in Maine. From this point forward, the program will be referenced as the Maine Pollutant Discharge Elimination System (MEPDES) permit program. NPDES permit #ME0100137 last issued on by the EPA on September 26, 1997, will be replaced upon issuance of a final MEPDES permit. Once replaced, all terms and conditions of the NPDES become null and void.
- b. Permit Summary: This permitting action is carrying forward all the terms and conditions of the 9/28/99 WDL action with the following exceptions:
1. Eliminating the monthly average and daily maximum water quality based mass and concentration limits for cyanide.
 2. Eliminating the whole effluent toxicity (WET) limit for the sea urchin (*Arbacia punctulata*).
 3. Establishing daily maximum water quality based mass and concentration limits for copper and requiring the submission of a toxicity reduction evaluation (TRE).
 4. Requiring the permittee to develop a wet weather management plan for the waste water treatment facility.
 5. Requiring the permittee to annually review and or update the Operations and Maintenance (O&M) manual for the treatment facility and appurtenant facilities.
 6. Requiring the town to make provisions to monitor five pump stations to determine the frequency and quantity (via measurement or estimation) of waste water discharged from the bypass structures. The permit requires the town to install a flow estimation system at the Bay View Street pump station as part of the pump station upgrade.
 7. Incorporating the terms and conditions of the federal pretreatment program as previously required to via the 9/30/97 NPDES permit.
- c. History: The most current relevant regulatory actions include:
- September 30, 1997* - The EPA issued a renewal of NPDES permit #ME0100137 for a five-year term.
- September 28, 1999* - The Department issued WDL #W002592-5L-D-R for a five-year term.
- May 25, 2000* - The Department administratively modified WDL #W002592-5L-D-R by establishing interim limits for the discharge of mercury.

2. PERMIT SUMMARY (cont'd)

May 1, 2003 – The Town of Camden submitted an application to the Department to modify WDL #W002592-5L-D-R to incorporate the terms and conditions of the MEPDES program such that the NPDES permit would be replaced by the MEPDES permit.

- c. Source Description: The bulk of the waste waters flows received at the Town's waste water treatment facility are generated by residential and light commercial entities within the Town of Camden and portions of the Town of Rockport. The collection system is approximately 17 miles in length, has seven pump stations and is a separated system with no combined sewer overflows (CSO). Two of the pump stations have on-site back-up power, four are served by mobile generator units and the largest pump station, Bay View Street pump station, is currently being upgraded and will also have on-site back-up power provisions. The permittee has indicated in their application for modification of the permit that five of the seven pump stations have provisions for emergency bypasses of untreated waste water. Special Condition J, *Pump Station Emergency Bypasses*, lists the individual pump stations and requires the permittee to track frequency of discharge occurrences and measure or estimate the quantity of discharge events. The previous license authorized the facility to receive up to 1,500 gallons of septage per day.

Up until February 1999, the only significant industrial contributor to the waste water treatment facility was a local tannery which resulted in the Town of Camden being required to develop a pretreatment program in accordance with federal regulations. The tannery property is now owned by the Town of Camden. Though the tannery is no longer active, the Department and EPA are requiring the Town of Camden to maintain a formal pretreatment program as the facility receives waste water from a local metal finishing operation that meets the criteria for the pretreatment program.

The waste water treatment facility also receives storm water and ground water associated with a quarry that is currently used to dispose of construction debris.

- d. Waste Water Treatment: The waste water treatment facility is capable of providing a secondary level of treatment via a comminutor, an aerated grit chamber, four aeration basins with a fine bubble diffused aeration system, two circular secondary clarifiers and an outfall pipe utilized as a chlorine contact structure for disinfection. See Attachment A of this license for a schematic of the treatment process. The facility uses sodium hypochlorite for disinfection. The facility is set up to provide for dechlorination using sodium bisulfite if necessary. The outfall consists of a 24-inch diameter ductile iron pipe extending out into the harbor approximately 250 feet with a diffuser consisting of 3 ports, each measuring 12 inches in diameter. The permittee has indicated that the diffuser ports are located in approximately 15 feet of water at mean low tide and 25 feet of water at high tide.

3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges require application of best practicable treatment, 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, Maine law, 38 M.R.S.A., Section 420, and Department Regulation Chapter 530.5, *Surface Water Toxics Control Program* requires 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 STANDARDS

Maine law 38 M.R.S.A., §469(3) classifies Camden Harbor at the point of discharge as a Class SB waterway. Maine law, 38 M.R.S.A., §465-B(2) describes the standards for classification of Class SB waterway.

5. EXISTING WATER QUALITY CONDITIONS

The 2002 *Integrated Water Quality Monitoring and Assessment Report* published by the Department pursuant to Section 305(b) of the Federal Water Pollution Control Act lists Camden Harbor as meeting the standards of its assigned classification with the exception of the designated use of harvesting of shellfish. The Department of Marine Resources (DMR) has traditionally closed portions of or all shellfish harvesting areas in the immediate vicinity of an outfall pipe from a POTW or residential overboard discharge due to the risk of a failure in the disinfection systems for the facilities. The DMR also closes shellfish harvesting as a precaution in the absence of instream water quality data. This Department is not aware of information that indicates the shellfish harvesting area is closed due to the day-to-day discharge of secondary treated effluent from Camden's waste water treatment facility. Compliance with the seasonal fecal coliform bacteria limits in this permitting action ensures that the discharge from the Camden waste water treatment facility will not seasonally cause or contribute to the shellfish harvesting closure.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Dilution Factors - Department Regulation Chapter 530.5, *Surface Water Toxics Control Program*, §D(3)(b) states that for discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE or CORMIX. Based

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

on the location and configuration of the outfall pipe, the Department has determined that at the full permitted flow of 1.21 MGD, the discharge from the Camden waste water treatment facility will be diluted by the following factors:

Acute = 27:1 Chronic = 50:1 Harmonic mean ⁽¹⁾ = 150:1

Footnote:

- (1) The harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by three (3). This multiplying factor is based on guidelines for estimation of human health dilution presented in the USEPA publication "*Technical Support Document for Water Quality-Based Toxics Control*" (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.
- b. Flow: The previous licensing action established a monthly average flow limitation of 1.21 MGD that is being carried forward in this permitting action as it remains representative of the monthly average design capacity of the facility.
- c. Biochemical Oxygen Demand (BOD5) & Total Suspended Solids (TSS): - The previous licensing established monthly and weekly average BOD5 and TSS concentration limits of 30 mg/L and 45 mg/L respectively, that 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 maximum daily BOD5 and TSS concentration limits of 50 mg/L were based on a Department best professional judgment of best practicable treatment (BPT). All three concentration limits are being carried forward in this permitting action. As for mass limitations, the previous licensing action established monthly average, weekly average and daily maximum technology based mass limitations that are being carried forward in this permitting action and are based on a monthly average limit of 1.21 MGD. The mass limits were derived as follows:

Monthly average: $(1.21 \text{ MGD})(8.34)(30 \text{ mg/L}) = 303 \text{ lbs/day}$

Weekly average: $(1.21 \text{ MGD})(8.34)(45 \text{ mg/L}) = 454 \text{ lbs/day}$

Daily Maximum: $(1.21 \text{ MGD})(8.34) (50 \text{ mg/L}) = 505 \text{ lbs/day}$

This permitting action also establishes a new requirement of 85% removal for BOD and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3).

Monitoring frequencies for BOD and TSS of 2/week established in the previous licensing action are being carried forward in this permitting action and are based on Department policy for facilities with a monthly average flow greater than 1.0 MGD but less than 5.0 MGD.

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

- d. Settleable Solids – The previous licensing established a daily maximum concentration limit of 0.3 ml/L for settleable solids that is being carried forward in this permitting action and is considered by the Department as BPT for secondary treated waste waters.
- e. Fecal coliform bacteria – The previous licensing action established seasonal (May 15 – September 30) monthly average and daily maximum limits of 15 colonies/100 ml and 50 colonies/100 ml respectively, that are consistent with the National Shellfish Sanitation Program. The limits are being carried forward in this permitting action.
- f. Total Residual Chlorine - The previous licensing action established monthly average and daily maximum BPT limits of 0.1 mg/L and 0.3 mg/L respectively for the discharge. 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. Licensing/permitting actions by the Department impose the more stringent of water quality or technology based limits. End-of-pipe water quality based concentration thresholds may be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	13 ug/L	7.5 ug/L	27:1	50:1	0.35 mg/L	0.38 mg/L

Example calculation: Acute – $0.013 \text{ mg/L} (27) = 0.35 \text{ mg/L}$

The Department has established a daily maximum best practicable treatment (BPT) limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine based compounds unless the calculated acute water quality based threshold is lower than 1.0 mg/L. For facilities that need to de-chlorinate the discharge to comply with water quality based thresholds, the Department has established daily maximum and monthly average best practicable treatment limits of 0.3 mg/L and 0.1 mg/L respectively. Because the facility needs to de-chlorinate the discharge to comply with the calculated water quality thresholds, this permitting action is carrying forward the daily maximum and monthly average BPT limitations of 0.3 mg/L and 0.1 mg/L respectively.

- g. pH – The previous licensing action established a pH range limit of 6.0 – 8.5 standard units that were considered BPT. This permitting action is establishing a pH range limit of 6.0 –9.0 standard units pursuant to a new Department rule found at Chapter 525(3)(III)(c). The new limits are considered BPT.

6. EFFLUENT LIMITATIONS AND 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, prohibits the discharge of effluents containing substances in amounts which 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 U.S. EPA. Department Rules, 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 and chemical specific (priority pollutant) monitoring, as required by Chapter 530.5, is included in order to fully characterize the effluent. The 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 waste water, 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 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, or "priority pollutant (PP)," 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, the Camden facility has been placed in the high frequency category for WET testing as the facility has been required to adopt a pretreatment program and in the high frequency category for chemical specific (priority pollutant) testing as the facility is permitted to discharge greater than 1.0 MGD. A recent review of Camden's data indicates that they have fulfilled the Chapter 530.5 testing requirements to date. See Attachment B of this Fact Sheet for a summary of the WET test results and Attachment C of this Fact Sheet for a summary of the chemical specific test dates evaluated.

Department Regulation Chapter 530.5 and Protocol E(1) of a document entitled Maine Department of Environmental Protection, Toxicity Program Implementation Protocols, dated July 1998, 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 for a facility.

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."

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

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

On May 21, 2003, the Department conducted an evaluation on the aforementioned tests results in accordance with the statistical approach outlined in EPA's March 1991 document entitled Technical Support Document (TSD) for Water Quality Based Toxics Control, Chapter 3.3.2 and Maine Department of Environmental Protection Guidance, July 1998, entitled Toxicity Program Implementation Protocols.

The 5/21/03 statistical evaluation indicates that the discharge does not exceed or have a reasonable potential to exceed the acute or chronic critical ambient water quality thresholds of 3.7% and 2.0% respectively (mathematical inverse of the applicable dilution factors) for any WET species tested to date. The previous licensing action granted a reduction in the WET testing to a frequency of screening level testing of 4/Year (four consecutive calendar quarters) beginning the twelve month period prior to the expiration date of the permit. Being that the previous licensing action was issued in September of 1999, the Town of Camden was to begin screening level testing in September of 2003. Therefore, this permitting action is requiring the Town of Camden to conduct a screening level of testing (4/Year) between September 2003 and September 2004 and then again beginning twelve months prior to the expiration date of the permit. No surveillance level of testing (1/Year) is required in the interim years.

Chemical Specific

The 5/21/03 evaluation indicates a 4/23/00 test result of 110 ug/L for copper exceeds the acute AWQC of 2.9 ug/L for copper and has a reasonable potential to exceed the chronic AWQC which is also 2.9 ug/L. Pursuant to Chapter 530.5§C(2) and §C(3), this permitting action is establishing monthly average (chronic) and daily maximum (acute) water based limits as follows:

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

<u>Acute</u>				
<u>Parameter</u>	<u>Acute⁽¹⁾ Criterion</u>	<u>Acute Dilution Factor</u>	<u>Calculated EOP⁽²⁾ Acute Con.</u>	<u>Month Avg. Mass Limit</u>
Copper	2.9 ug/L	27:1	78 ug/L	0.79 lbs/day

Example Calculation:

$$\text{Copper} - \frac{(2.99 \text{ ug/L})(27)(8.34)(1.21 \text{ MGD})}{1000 \text{ ug/mg}} = 0.79 \text{ lbs/day}$$

<u>Chronic</u>				
<u>Parameter</u>	<u>Chronic⁽¹⁾ Criterion</u>	<u>Chronic Dilution Factor</u>	<u>Calculated EOP⁽²⁾ Chronic Con.</u>	<u>Month Avg. Mass Limit</u>
Copper	2.9 ug/L	50:1	145 ug/L	1.46 lbs/day

Footnotes:

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

The calculations above are correct in that the monthly average limit for copper is higher than the daily maximum limit. This anomaly occurs when the ratio between the acute and chronic AWQC is not proportional to the ratio between the acute and chronic dilution factors. As a result, the Department is establishing the more stringent of the two, the daily maximum limit of 0.79 lbs/day.

Concentration limits in this licensing 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 license 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 facilities for operating at flows less than permitted design flow of the waste water plant, the Department has increased the calculated concentration limit by a factor of 1.5. This represents an effluent concentration that is achievable through proper operation and maintenance of the treatment plant. Therefore, end-of-pipe concentration limits are as follows:

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

<u>Parameter</u>	<u>Calculated EOP Concentration</u>	<u>Daily Maximum Conc. Limit</u>
Copper	78 ug/L	124 ug/L

As with WET testing, the Department establishes monitoring frequencies in permits for chemical specific parameters that exceed or have a reasonable potential to exceed acute, chronic or human health AWQC based on the timing, severity and frequency of the results of concern. A more in-depth review of the chemical specific data in Attachment C of this Fact Sheet indicates the 4/23/00 test result of 110 ug/L for copper is ten times higher than any other copper test result in the town's chemical specific testing history. As a result, the Department is establishing a surveillance level testing requirement of 1/Year. In addition, due to the exceedence of the acute AWQC for copper, the permittee must submit a toxicity reduction evaluation (TRE) pursuant to Chapter 530.5§C(3) as specified by Special Condition H, *Toxicity Reduction Evaluation (TRE)*.

As for the remaining chemical specific parameters tested to date, none of the test results in the 60-month evaluation period exceed or have a reasonable potential to exceed applicable acute, chronic or human health AWQC. Therefore, as with WET testing, this permitting action is establishing a screening level of testing (4/Year – four consecutive calendar quarters) between September 2003 and September 2004 and then again beginning twelve months prior to the expiration date of the permit. No surveillance level of testing (1/Year) is required in the interim years.

It is noted the discharge of mercury is being regulated by a separate permitting document that has established average and maximum concentration limits of 83.4 ng/L and 125.1 ng/L respectively. The sampling frequency for mercury has been established as 4/Year.

7. PRETREATMENT

The permittee is required to administer a pretreatment program based on the authority granted under Federal regulations 40 CFR §122.44(j), 40 CFR Part 403 and section 307 of the Federal Water Pollution Control Act (Clean Water Act) and Department rule Chapter 528, *Pretreatment Program*. The permittee's pretreatment program received EPA approval on February 22, 1982, and as a result, appropriate pretreatment program requirements were incorporated into the previous National Pollutant Discharge Elimination System (NPDES) permit which were consistent with that approval and federal pretreatment regulations in effect when the permit was issued. Since issuance of the previous NPDES permit, the State of Maine has been authorized by the EPA to administer the federal pretreatment program as part of receiving authorization to administer the NPDES program.

7. PRETREATMENT (cont'd)

Upon issuance of this MEPDES permit, the permittee is obligated to modify (if applicable) its pretreatment program to be consistent with current federal regulations and State rules. Those activities that the permittee must address include, but are not limited to, the following: (1) develop and enforce Department approved specific effluent limits (technically-based local limits - last approved by the EPA on July 29, 1999; (2) revise the local sewer-use ordinance or regulation, as appropriate, to be consistent with federal regulations and State rules; (3) develop an enforcement response plan; (4) implement a slug control evaluation program; (5) track significant non-compliance for industrial users; and (6) establish a definition of and track significant industrial users.

These requirements are necessary to ensure continued compliance with the POTW's MEPDES permit and its sludge use or disposal practices.

In addition to the requirements described above, this permit requires that within 180 days of the permit's effective date, the permittee shall submit to the Department in writing, a description of proposed changes to permittee's pretreatment program deemed necessary to assure conformity with current federal and State pretreatment regulations and rules respectively. These requirements are included in the permit (Special Condition N) to ensure that the pretreatment program is consistent and up-to-date with all pretreatment requirements in effect. Lastly, by March 1st of each calendar year, the permittee must submit a pretreatment report detailing the activities of the program for the twelve month period ending 60 days prior to the due date.

8. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has made a determination based on a best professional judgment that 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.

9. PUBLIC COMMENTS

Public notice of this application was made in the Camden Herald newspaper on or about April 10, 2003. 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 to request a public hearing, pursuant to Chapter 522 of the Department's rules.

10. DEPARTMENT CONTACTS

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

Gregg Wood
Division of Water Resource Regulation
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

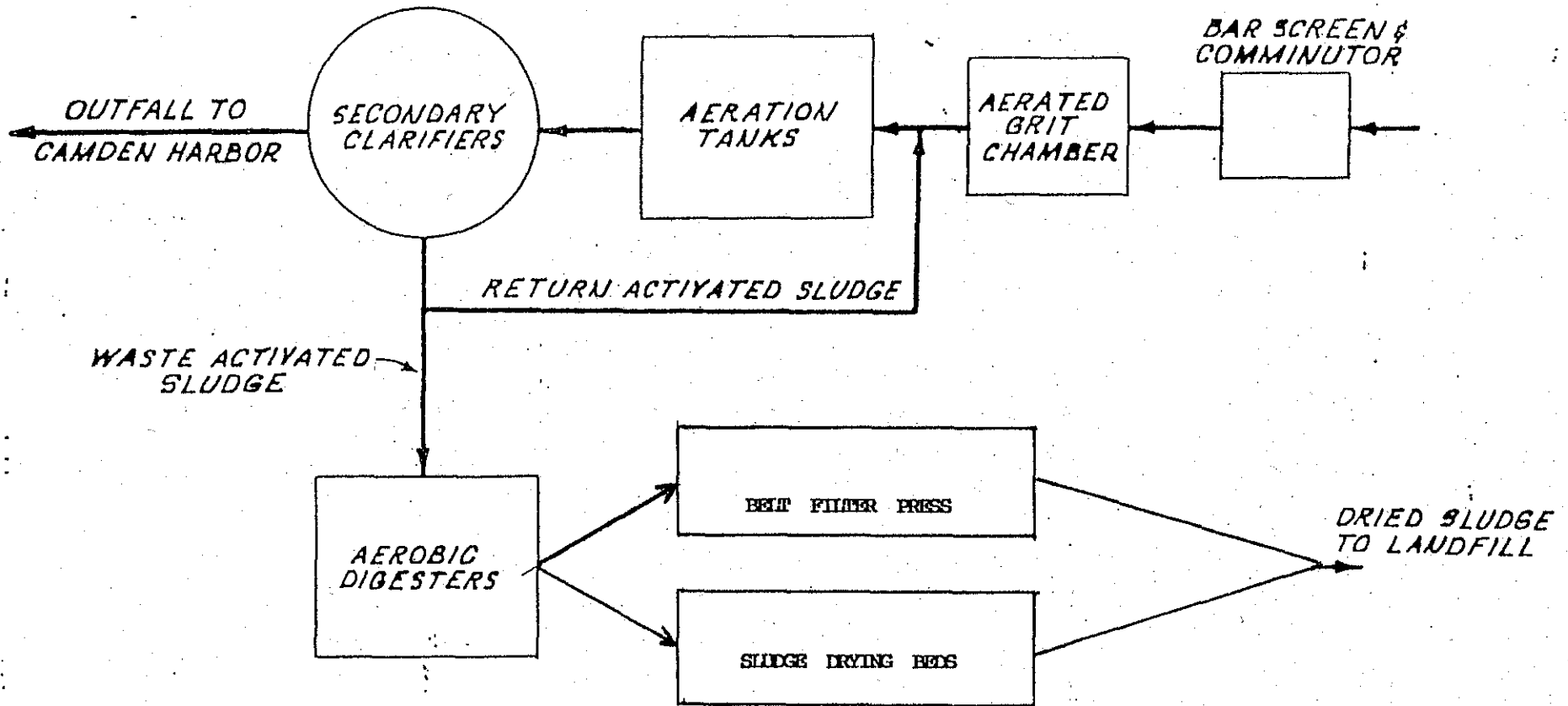
Telephone (207) 287-3901

11. RESPONSE TO COMMENTS

During the period of June 18, 2003 through July 18, 2003, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System permit to be issued to the Town of Camden. The Department did not receive any comments from the permittee or other interested parties. Therefore, no Response to Comments has been prepared.

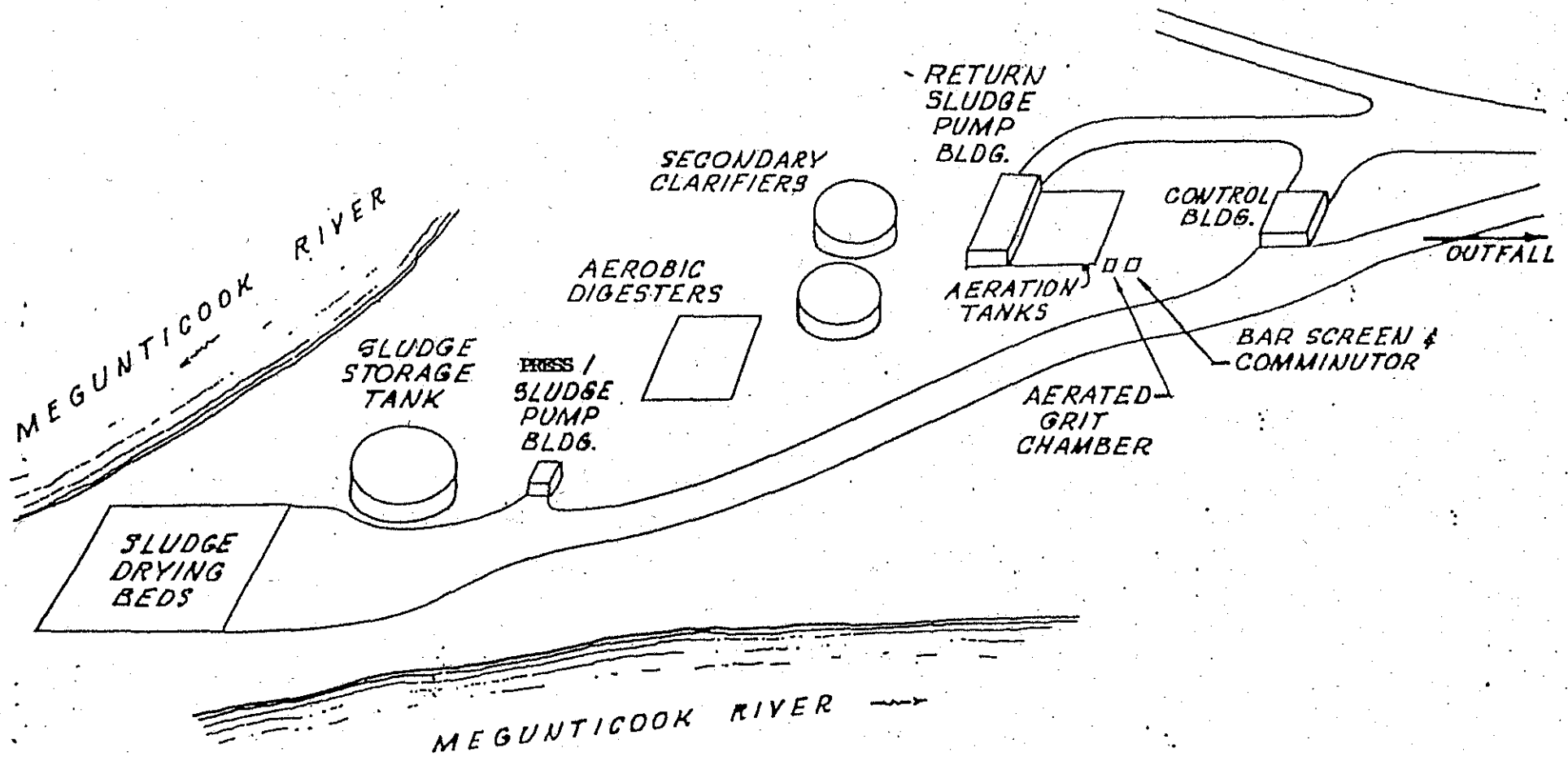
ATTACHMENT A

SCHEMATIC
GAMDEN WATER POLLUTION CONTROL PROCESS



GREEN ENGINEERING AFFILIATES INC.
BOSTON, MASSACHUSETTS

CAMDEN WATER POLLUTION CONTROL PLANT



GREEN ENGINEERING AFFILIATES INC.
BOSTON, MASSACHUSETTS

ATTACHMENT B

Species	Test	Test Result %	Sample Date
MYSID SHRIMP	LC50	>100	09/11/1991
SILVER SIDE	LC50	100.00	12/18/1991
MYSID SHRIMP	LC50	>100	03/24/1992
SILVER SIDE	LC50	>100	03/24/1992
MYSID SHRIMP	LC50	>100	06/02/1992
SILVER SIDE	LC50	>100	06/02/1992
MYSID SHRIMP	LC50	>100	09/10/1992
SILVER SIDE	LC50	>100	09/10/1992
MYSID SHRIMP	LC50	>100	12/21/1992
SILVER SIDE	LC50	>100	12/21/1992
MYSID SHRIMP	LC50	>100	03/24/1993
SILVER SIDE	LC50	>100	03/24/1993
MYSID SHRIMP	LC50	>100	06/15/1993
SILVER SIDE	LC50	>100	06/15/1993
MYSID SHRIMP	LC50	>100	06/07/1994
SILVER SIDE	LC50	>100	06/07/1994
MYSID SHRIMP	LC50	82.8	06/05/1995
SILVER SIDE	LC50	58.8	06/05/1995
MYSID SHRIMP	A_NOEL	64.4	11/28/1995
MYSID SHRIMP	LC50	>100	11/28/1995
SEA URCHIN	C_NOEL	25	11/28/1995
SILVER SIDE	A_NOEL	75	11/28/1995
SILVER SIDE	C_NOEL	50	11/28/1995
SILVER SIDE	LC50	>100	11/28/1995
MYSID SHRIMP	A_NOEL	100	06/10/1996
MYSID SHRIMP	LC50	>100	06/10/1996
SEA URCHIN	C_NOEL	<6.25	06/10/1996
SILVER SIDE	A_NOEL	77.8	06/10/1996
SILVER SIDE	C_NOEL	100	06/10/1996
SILVER SIDE	LC50	>100	06/10/1996
MYSID SHRIMP	A_NOEL	13.8	06/15/1997
MYSID SHRIMP	LC50	>100	06/15/1997
SEA URCHIN	C_NOEL	<6.25	06/15/1997
SILVER SIDE	A_NOEL	50.0	06/15/1997
SILVER SIDE	C_NOEL	50.0	06/15/1997
SILVER SIDE	LC50	78.8	06/15/1997
MYSID SHRIMP	A_NOEL	66.7	06/07/1998
MYSID SHRIMP	LC50	>100	06/07/1998
SEA URCHIN	C_NOEL	100	06/07/1998
SILVER SIDE	A_NOEL	52.9	06/07/1998
SILVER SIDE	C_NOEL	50	06/07/1998

Species	Test	Test Result %	Sample Date
SILVER SIDE	LC50	67.6	06/07/1998
MYSID SHRIMP	A_NOEL	76.0	06/20/1999
MYSID SHRIMP	LC50	>100	06/20/1999
SEA URCHIN	C_NOEL	50	06/20/1999
SILVER SIDE	A_NOEL	51.4	06/20/1999
SILVER SIDE	C_NOEL	50	06/20/1999
SILVER SIDE	LC50	68.2	06/20/1999
MYSID SHRIMP	A_NOEL	100	04/23/2000
MYSID SHRIMP	LC50	>100	04/23/2000
SEA URCHIN	C_NOEL	50	04/23/2000
SILVER SIDE	A_NOEL	100	04/23/2000
SILVER SIDE	LC50	>100	04/23/2000
MYSID SHRIMP	A_NOEL	100	04/09/2001
MYSID SHRIMP	LC50	>10	04/09/2001
SEA URCHIN	C_NOEL	100	04/09/2001
SILVER SIDE	A_NOEL	100	04/09/2001
SILVER SIDE	LC50	>100	04/09/2001
SEA URCHIN	C_NOEL	50	09/24/2001
MYSID SHRIMP	A_NOEL	100	04/22/2002
MYSID SHRIMP	LC50	>100	04/22/2002
SEA URCHIN	C_NOEL	100	04/22/2002
SILVER SIDE	A_NOEL	53.5	04/22/2002
SILVER SIDE	LC50	87.6	04/22/2002
MYSID SHRIMP	A_NOEL	100	04/23/2002
MYSID SHRIMP	LC50	>100	04/23/2002
SEA URCHIN	C_NOEL	100	04/23/2002
SILVER SIDE	A_NOEL	53.5	04/23/2002
SILVER SIDE	LC50	87.6	04/23/2002

ATTACHMENT C

Sample Date: 06/09/1998
Plant flows not provided

Total Tests: 124
Missing Compounds: 0
Tests With High DL: 1
M = 1 V = 0 A = 0
BN = 0 P = 0 other = 0

Sample Date: 06/20/1999
Plant flows not provided

Total Tests: 132
Missing Compounds: 0
Tests With High DL: 1
M = 1 V = 0 A = 0
BN = 0 P = 0 other = 0

PP Data for "Hits" Only

CAMDEN

CAMDEN HARBOR

COPPER

MDL = 3 ug/l

Conc, ug/l	MDL	Sample Date	Date Entered
6.000000	OK	06/20/1999	08/11/1999
10.000000	OK	04/09/2001	10/15/2001
13.000000	OK	09/24/2001	06/10/2002
13.000000	OK	06/09/1998	07/30/1998
14.000000	OK	04/22/2002	07/23/2002
110.000000	OK	04/23/2000	07/27/2000
