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.

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

December 19, 2003

Mr. Carl Flora
Vice President & Legal Counsel
Loring Development Authority
154 Development Drive, Suite F
Limestone, ME. 04750

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0090174
Maine Waste Discharge License Application #W006654-5L-E-R
Final Permit/License Renewal

Dear Mr. Ward:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL which was approved by the Department of Environmental Protection. This permit/license supersedes the National Pollutant Discharge Elimination System (NPDES) permit #ME0090174, last issued by the Environmental Protection Agency (EPA) on September 19, 2000. Please read the permit/license modification/renewal 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 the 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: William Sheehan, DEP/NMRO
Ted Lavery, 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

web site: www.state.me.us/dep

printed on recycled paper

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

LORING DEVELOPMENT AUTHORITY PUBLICLY OWNED TREATMENT WORKS CARIBOU, AROOSTOOK COUNTY, MAINE ME0090174 W006654-5L-E-R	**APPROVAL**	) MAINE POLLUTANT DISCHARGE) ELIMINATION SYSTEM PERMIT) AND) WASTE DISCHARGE LICENSE) **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 LORING DEVELOPMENT AUTHORITY (LDA), 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 renewal of Department Waste Discharge License (WDL) #W006654-40-C-R which was issued on September 22, 1995 and is due to expire on September 22, 2005. The 9/22/95 WDL authorized the discharge of up to a monthly average flow of 2.5 million gallons per day (MGD) of secondary treated sanitary waste water to the Little Madawaska River, Class B, in Caribou, Maine.

It is noted the previous licensing action was issued in the name of the Loring Air Force Base as the federal government owned and operated the facility as part of a military base. At that time, the discharge was categorized as an overboard discharge under state law rather than a discharge from a publicly owned treatment works. State law found at 38 M.R.S.A., §414(2) authorizes the Department to issue licenses for overboard discharges for terms of up to ten years. With the transfer of the military base from the U.S. government to the LDA, the Department has made the determination the LDA is a quasi-municipal organization under state law. As a result, the term of this permit is limited to a five-year term pursuant to Maine law, 38 M.R.S.A. §414(2).

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 #ME0090174 (same as NPDES permit number) will utilized as the primary reference number.

PERMIT SUMMARY

This permitting action is similar to the 9/22/95 WDL action in that it is;

1. Carrying forward the monthly average flow limit of 2.5 MGD.

2. Carrying forward the monthly average, weekly average and daily maximum technology based mass and concentration limits for biochemical oxygen demand (BOD_5) and total suspended solids (TSS).

3. Carrying forward the daily maximum technology based concentration limit for settleable solids.

4. Carrying forward the daily maximum water quality based concentration limits for *E. coli* bacteria.

5. Carrying forward the monthly average and daily maximum water quality based concentration limits for total residual chlorine.

6. Carrying forward the surveillance and screening level whole effluent toxicity (WET) and chemical specific (priority pollutant) testing.

This permitting action is different than the 9/22/95 WDL action in that it is;

7. Establishing two tiers of limitations; one based on a permitted flow of 2.5 MGD and one based on 1.25 MGD. The intent is to maximum the dilution factors during this period of low flows to the treatment plant due to the base closure yet reserve the full waste load allocation (2.5 MGD) for future development at the former military installation.

8. Revising the daily maximum technology based pH range limit from 6.0 – 8.5 standard units to 6.0 – 9.0 standard units based on a new Department regulation.

9. Establishing a requirement for achieving a minimum of 85% removal for BOD5 and TSS.

10. Requiring that surveillance level (1/Year) WET testing and chemical specific testing to be conducted in a different calendar quarter of each year for the first four years of the permit.

11. Establishing water quality based chronic no observed effect level (C-NOEL) WET limits for the fathead minnow and brook trout.

12. Establishing a seasonal (June 1 – September 30) monitoring and reporting requirement for total phosphorus.

13. Establishing monthly average and or daily maximum water quality based mass and concentration limits for arsenic, copper and lead.

PERMIT SUMMARY (cont'd)

14. Requiring the permittee to prepare and submit a Septage Management Plan to Department for review and approval.

15. Requiring the permittee to prepare and submit a Wet Weather Flow Management Plan to the Department for review and approval.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated November 14, 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 LORING DEVELOPMENT AUTHORITY (LDA), to discharge up to a monthly average flow of 2.5 million gallons per day (MGD) of secondary treated sanitary waste waters to the Little Madawaska River, Class B, in Caribou. The discharges shall be 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 supersedes WDL #W006654-40-C-R issued on September 22, 1995.

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

DONE AND DATED AT AUGUSTA, MAINE, THIS 19TH DAY OF December, 2003.

COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY: _____ for

Dawn Gallagher, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application September 16, 2002.

Date of application acceptance September 27, 2002.

FILED
DEC 22 2003
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

Date filed with Board of Environmental Protection _____

This Order prepared by GREGG WOOD, BUREAU OF LAND & WATER QUALITY
W66545LER 12/18/03

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date of the permit and lasting through permit expiration, the permittee is authorized to discharge secondary treated waste waters to the Little Madawaska River. Such treated waste water discharges shall be limited and monitored by the permittee as specified below.

TIER I - OUTFALL #001 – When dry weather flows are ≤1.25 MGD

Effluent Characteristic	Discharge Limitations						Minimum 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]	1.25 MGD[03]	---	Report (MGD)	---	---	---	Continuous [99/99]	Recorder [RC]
Biochemical Oxygen Demand (BOD_5) [00310]	313 lbs/Day [26]	469 lbs/Day [26]	522 lbs/Day[26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Week [02/07]	Composite [24]
BOD5 % Removal(1) [81010]	---	---	---	85% [11]	---	---	1/Month [01/30]	Calculate [CA]
Total Suspended Solids (TSS) [00530]	313 lbs/Day [26]	469 lbs/Day [26]	522 lbs/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% [11]	---	---	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	2/Week [02/07]	Grab [GR]
E. coli Bacteria (2) [31633] *(May 15 – Sept. 30)*	---	---	---	64/100 ml(3) [13]	---	427/100 ml [13]	3/Week [03/07]	Grab [GR]
Total Residual Chlorine(2,4) *(May 15 – Sept. 30)* [50060]	---	---	---	0.07 mg/L [19]	---	0.1 mg/L [19]	5/Week [05/07]	Grab [GR]

SPECIAL CONDITIONS

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

***TIER I* - OUTFALL #001 – When dry weather flows are ≤1.25 MGD**

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Total Phosphorus [00665] *(June 1 – September 30)*	Report lbs/Day [26]	---	Report lbs/Day [26]	Report mg/L [19]	---	Report mg/L [19]	1/Month[01/30]	Composite [24]
Arsenic[01002]	0.0025 lbs/Day[26]	---	---	0.36 ug/L(5) [28]	---	---	1/Year[01/YR]	Composite [24]
Copper[01042]	0.41 lbs/Day[26]	---	---	58 ug/L[28]	---	---	1/Year[01/YR]	Composite [24]
Lead[01051]	0.078 lbs/Day[26]	---	---	11 ug/L[28]	---	---	1/Month[01/30]	Composite [24]
pH (Std. Units) [01077]	---	---	---	---	---	6.0-9.0 [12]	5/Week [05/07]	Grab [GR]

SPECIAL CONDITIONS

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

TIER I **- SURVEILLANCE LEVEL TESTING – Beginning upon issuance and lasting through twelve months prior to permit expiration.**

Effluent Characteristic	Discharge Limitations					Monitoring Requirements		
Whole Effluent Toxicity (WET)[6]								
A-NOEL								
Ceriodaphnia dubia [TDA3B]	---	---	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Pimephales promelas [TDA6C]	---	---	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Salvelinus fontinalis [TDA6F]	---	---	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
C-NOEL								
Ceriodaphnia dubia [TBP3B]	---	---	---	---	---	Report% [23]	1/Year [01/YR]	Composite [24]
Pimephales promelas [TBP6C]	---	---	---	---	---	15% [23]	1/Year [01/YR]	Composite [24]
Salvelinus fontinalis [TBQ6F]	---	---	---	---	---	15% [23]	1/Year [01/YR]	Composite [24]
Chemical Specific[7] *[50008]*	---	---	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/ Grab[24/GR]

SCREENING LEVEL TESTING – Beginning twelve months prior to permit expiration.

Effluent Characteristic	Discharge Limitations						Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (WET)[6]								
A-NOEL								
Ceriodaphnia dubia [TDA3B]	---	---	---	---	---	Report % [23]	1/Quarter [01/90]	Composite [24]
Salvelinus fontinalis [TDA6F]	---	---	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Pimephales promelas [TDA6C]	---	---	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
C-NOEL								
Ceriodaphnia dubia [TBP3B]	---	---	---	---	---	Report % [23]	1/Quarter [01/90]	Composite [24]
Salvelinus fontinalis [TBQ6F]	---	---	---	---	---	15% [23]	2/Year [02/YR]	Composite [24]
Pimephales promelas [TBP6C]	---	---	---	---	---	15% [23]	2/Year [02/YR]	Composite [24]
Chemical Specific[7] *[50008]*	---	---	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/ Grab [24/GR]

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date of the permit and lasting through permit expiration, the permittee is authorized to discharge secondary treated waste waters to the Little Madawaska River. Such treated waste water discharges shall be limited and monitored by the permittee as specified below.

***TIER II* - OUTFALL #001 – When dry weather flows are ≥1.25 MGD**

Effluent Characteristic	Discharge Limitations						Minimum 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]	2.5 MGD[03]	---	Report (MGD)	---	---	---	Continuous [99/99]	Recorder [RC]
Biochemical Oxygen Demand (BOD_5) (1) [00310]	626 lbs/Day [26]	938 lbs/Day [26]	1,043 lbs/Day[26]	30 mg/L [19]	45 mg/L [19]	50 mg/L [19]	2/Week [02/07]	Composite [24]
BOD5 % Removal(1) [81010]	---	---	---	85% [11]	---	---	1/Month [01/30]	Calculate [CA]
Total Suspended Solids (TSS) [00530]	626 lbs/Day [26]	938 lbs/Day [26]	1,043 lbs/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% [11]	---	---	1/Month [01/30]	Calculate [CA]
Settleable Solids [00545]	---	---	---	---	---	0.3 ml/L [25]	2/Week [02/07]	Grab [GR]
E. coli Bacteria (2) [31633] *(May 15 – Sept. 30)*	---	---	---	64/100 ml(3) [13]	---	427/100 ml [13]	3/Week [03/07]	Grab [GR]
Total Residual Chlorine(2,4) *(May 15 – Sept. 30)* [50060]	---	---	---	0.04 mg/L(4) [19]	---	0.06 mg/L [19]	5/Week [05/07]	Grab [GR]

SPECIAL CONDITIONS

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

***TIER II* - OUTFALL #001 – When dry weather flows are ≥1.25 MGD**

Effluent Characteristic	Discharge Limitations						Minimum Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Total Phosphorus [00665] *(June 1 – September 30)*	Report lbs/Day [26]	---	Report lbs/Day [26]	Report mg/L [19]	---	Report mg/L [19]	1/Month[01/30]	Composite [24]
Arsenic[01002]	0.0035 lbs/Day[26]	---	---	0.26 ug/L(5) [28]	---	---	1/Year[01/YR]	Composite [24]
Copper[01042]	0.47 lbs/Day[26]	---	0.58 lbs/Day[26]	34 ug/L[28]	---	42 ug/L[28]	1/Month[01/30]	Composite [24]
Lead[01051]	0.091 lbs/Day[26]	---	---	6.6 ug/L[28]	---	---	1/Month[01/30]	Composite [24]
pH (Std. Units) [01077]	---	---	---	---	---	6.0-9.0 [12]	5/Week [05/07]	Grab [GR]

SPECIAL CONDITIONS

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

TIER II **- SURVEILLANCE LEVEL TESTING – Beginning upon issuance and lasting through twelve months prior to permit expiration.**

Effluent Characteristic	Discharge Limitations					Monitoring Requirements		
Whole Effluent Toxicity (WET)[6]								
A-NOEL								
Ceriodaphnia dubia [TDA3B]	---	---	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Pimephales promelas [TDA6C]	---	---	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Salvelinus fontinalis [TDA6F]	---	---	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
C-NOEL								
Ceriodaphnia dubia [TBP3B]	---	---	---	---	---	Report% [23]	1/Year [01/YR]	Composite [24]
Pimephales promelas [TBP6C]	---	---	---	---	---	26% [23]	1/Year [01/YR]	Composite [24]
Salvelinus fontinalis [TBQ6F]	---	---	---	---	---	26% [23]	1/Year [01/YR]	Composite [24]
Chemical Specific[7] *[50008]*	---	---	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/ Grab[24/GR]

SCREENING LEVEL TESTING – Beginning twelve months prior to permit expiration.

Effluent Characteristic	Discharge Limitations					Monitoring Requirements		
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity (WET) [6]								
A-NOEL								
Ceriodaphnia dubia [TDA3B]	---	---	---	---	---	Report % [23]	1/Quarter [01/90]	Composite [24]
Salvelinus fontinalis [TDA6F]	---	---	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Pimephales promelas [TDA6C]	---	---	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
C-NOEL								
Ceriodaphnia dubia [TBP3B]	---	---	---	---	---	Report % [23]	1/Quarter [01/90]	Composite [24]
Salvelinus fontinalis [TBQ6F]	---	---	---	---	---	26 % [23]	2/Year [02/YR]	Composite [24]
Pimephales promelas [TBP6C]	---	---	---	---	---	26 % [23]	2/Year [02/YR]	Composite [24]
Chemical Specific[7] *[50008]*	---	---	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/ Grab [24/GR]

SPECIAL CONDITIONS

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

Footnotes:

Sampling Locations:

Influent sampling for BOD_5 and TSS shall be sampled after the influent parshall flume.

Effluent receiving secondary treatment (Outfall #001) shall be sampled for all parameters after the chlorine contact chamber on a year-round basis.

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

Sampling – Sampling and analysis must be conducted in accordance with; a) methods approved 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.

Upon issuance of the permit, compliance will be based on the Tier I limitations that are based on a monthly average dry weather flow of 1.25 MGD. For the purposes of this permitting action, dry weather flows are defined as flow in the sewerage system that occurs as a result of non-storm events or are caused solely by ground water infiltration. The permittee is not authorized to discharge under the Tier II limitations unless dry weather influent flows to the treatment plant exceed 1.25 MGD for three consecutive months. The permittee must receive written authorization from the Department prior to Tier II limitations becoming effective.

1. **Percent removal** - The treatment facility shall maintain a minimum of 85 percent removal of both BOD_5 and TSS. The percent removal shall be based on a monthly average calculation using influent and effluent concentrations. The percent removal shall be waived when the monthly average influent concentration is less than 200 mg/L. For instances when this occurs, the facility shall report *"NODI-9"* on the monthly Discharge Monitoring Report.

2. ***E. coli* bacteria and total residual chlorine (TRC)** - Limits are seasonal and apply between May 15 and September 30 of each calendar year. The Department reserves the right to require disinfection on a year-round basis to protect the health and welfare of the public.

3. ***E. coli* bacteria** – The monthly average limitation is a geometric mean limitation and shall be calculated and reported as such.

SPECIAL CONDITIONS

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

Footnotes:

4. **Total residual chlorine** - Shall be tested using Amperometric Titration or the DPD Spectrophotometric Method. The EPA approved methods are found in Standard Methods for the Examination of Water and Waste Water, (most current edition), Method 4500-CL-E and Method 4500-CL-G or U.S.E.P.A. Manual of Methods of Analysis of Water and Wastes.

   Compliance with the monthly average limitation will be based on EPA's minimum level (ML) of detection of 50 ug/L (0.05 mg/L). All analytical test results shall be reported to the Department including results which are detected below the ML of 0.05 mg/L.

   Detectable results: All detectable analytical test results shall be reported to the Department including results which are detected below the ML of 0.05 mg/L. If the concentration result is at or above 0.05 mg/L, the concentration shall be reported at that level.

   Non-detectable results: If the analytical test result is below 0.05 mg/L, the concentration result shall be reported as <X where X is the detection level achieved by the laboratory for that test.

5. **Arsenic (Total)** - Compliance with the monthly average limitation will be based on the Department's reporting level (RL) of detection of 5 ug/L.

   Detectable results: All detectable analytical test results shall be reported to the Department including results which are detected below the RL of 5 ug/L. If the concentration result is at or above 5 ug/L, the concentration shall be reported at that level.

   Non-detectable results: If the analytical test result is below 5 ug/L, the concentration result shall be reported as <X where X is the detection level achieved by the laboratory for that test. Because a mass cannot be calculated with a less than value, report < 0.0025 lbs/day for Tier I and <0.0035 lbs/day for Tier II on the DMR.

6. **Whole effluent toxicity (WET) testing** - Definitive WET testing is a multi-concentration testing event which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. Tests shall conducted such that a minimum of five dilutions bracketing the critical acute and chronic dilution of 18% and 15% respectively for Tier I and 30% and 26% respectively for Tier II are performed. 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.

SPECIAL CONDITIONS

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

Footnotes:

Beginning upon issuance of this permit and lasting through twelve months prior to the expiration date of the permit, the permittee shall initiate surveillance level WET testing at a frequency of once per year on the water flea (*Ceriodaphnia dubia*), the fathead minnow (*Pimephales promelas*) and the brook trout (*Salvelinus fontinalis*). Tests shall be conducted in a different calendar quarter each year whereby a WET test is conducted in all four calendar quarters during the first four years of the permit. Results shall be submitted to the Department within thirty (30) days of the permittee receiving the data report from the laboratory conducting the testing.

Beginning twelve months prior to the expiration date of the permit, the permittee shall initiate screening level WET tests at a frequency of four per year (four consecutive calendar quarters). Testing shall be conducted on the water flea (*Ceriodaphnia dubia*) and the fathead minnow (*Pimephales promelas*) in two of the four calendar quarters and conducted on the water flea (*Ceriodaphnia dubia*) and the brook trout (*Salvelinus fontinalis*) in the remaining two of the four calendar quarters. Results shall be submitted to the Department within thirty (30) days of the permittee receiving the data report from the laboratory conducting the testing. 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 Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013.

b. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, October 2002, EPA-821-R-02-012.

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 each and every time a WET test is performed.

7. **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.

Beginning upon issuance of this permit and lasting through twelve months prior to the expiration date of the permit, surveillance level chemical specific testing shall be conducted at a frequency of once per year (any calendar quarter). **Beginning twelve months prior to the expiration date of the permit**, screening level chemical specific

SPECIAL CONDITIONS

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

Footnotes:

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 DMR reporting, enter a "NODI-9" for *no testing done this monitoring period* or "1" for *yes, testing done this monitoring 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.

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.

SPECIAL CONDITIONS

C. DISINFECTION

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

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., 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.

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 and **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
Northern Maine Regional Office
Bureau of Land and Water Quality
Division of Compliance, Engineering & Technical Assistance
1235 Central Drive, Skyway Park
Presque Isle, Maine 04769-2094

SPECIAL CONDITIONS

G. 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.

H. 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.

I. 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 March 1, 2004 *(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.

SPECIAL CONDITIONS

J. 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.

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.

K. DISPOSAL OF SEPTAGE WASTE IN WASTE WATER TREATMENT FACILITY

During the effective period of this permit, the permittee is authorized to receive and introduce into the treatment process or solids handling stream up to **a maximum of 10,000 gallons per day** of septage, subject to the following terms and conditions:

1. **On or before March 1, 2004,** *(PCS Code 88899)* the permittee shall submit to the Department for review and approval, a Septage Management Plan that fulfills the criteria as outlined in Department rule, Chapter 555, *Standards For The Addition Of Septage To Waste Water Treatment Facilities*, Section 6(A-L). See Attachment D of the Fact Sheet for a copy of the Chapter 555 rule.

2. 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.

3. 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.

4. 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

5. 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.

6. 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.

7. Holding tank waste water shall not be recorded as septage but should be reported in the treatment facility's influent flow.

L. TOXICITY REDUCTION EVALUATION (TRE)

Within thirty (30) days of the effective date of this permit, 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 exceedences of ambient water quality criteria for arsenic.

M. 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 and or ambient water quality monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

ATTACHMENT A

PROPOSED DRAFT

FRESHWATER WHOLE EFFLUENT TOXICITY (WET) TEST REPORT

Facility _____ DEP License No _____ NPDES permit No _____

Contact person _____ Telephone No _____

Date initially sampled _____ (mm/dd/yy) Date tested _____ (mm/dd/yy) Chlorinated? _____

Test type screening _____ surveillance _____ Dechlorinated? _____

Test required by: DEP/EPA _____

Results % effluent

	Water flea	Trout	Fathead
LC50			
A-NOEL			
C-NOEL			

Receiving Water Concentration

A-NOEL	
C-NOEL	

Data summary

	water flea			trout			fat head		
	% survival		no. young	% survival		final wt (mg)	% survival		final wt (mg)
QC standard	A>90	C>80	>15/female	A>90	C>80	>2% increase	A>89	C>79	>0.25
lab control									
river water control									
conc. 1 (%)									
conc. 2 (%)									
conc. 3 (%)									
conc. 4 (%)									
conc. 5 (%)									
conc. 6 (%)									
stat test used									

place * next to values statistically different from controls for trout show final wt and % incr for both controls

Reference toxicant

	water flea		trout		fat head	
	LC50/A-NOEL	C-NOEL	LC50/A-NOEL	C-NOEL	LC50/A-NOEL	C-NOEL
toxicant / date						
limits (mg/l)						
results (mg/l)						

Comments _____

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

signature _____ company _____

printed name _____ address _____

tel. no _____

Report analytical chemistry on reverse side.

ANALYTICAL CHEMISTRY RESULTS
FRESHWATER TESTS

Date collected _____ mm/dd/yy

Date analyzed _____ mm/dd/yy

Lab ID No. _____

Analyte	Report Units	Results receiving water	Results effluent	Detection level	Method
Alkalinity	mg/L			mg/L	
Ammonia nitrogen	µg/L			µg/L	
Specific conductance	µmhos			µmhos	
Total residual chlorine	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 calcium	mg/L			mg/L	
Total chromium	µg/L			µg/L	
Total copper	µg/L			µg/L	
Total hardness	mg/L			mg/L	
Total lead	µg/L			µg/L	
Total magnesium	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. _____