STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

Chris White
Town of Old Orchard Beach
24 Manor Street
Old Orchard Beach, Maine 04064

April 19, 2005

RE: Maine Pollutant Discharge Elimination System Permit (MEPDES) # ME0101524
Maine Waste Discharge License (WDL) Application # W002786-5L-D-R
Final Document

Dear Mr. White:

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

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

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

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

Sincerely,

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

Enc. Matt Hight, DEP/SMRO
Roger Janson, USEPA

WDS:W002786

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

(reprinted from April 2003 O&M Newsletter)

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

1. If the parameter was included on previous DMRs, but only the limit was changed, there will be a space for the data. Please go ahead and enter it. When the changes are made to PCS, the program will have the data and compare it to the new limit.

2. When a parameter is eliminated from monitoring in your new permit, but there is a delay in changing the DMR, you will have a space on the DMR that needs to be filled. For a parameter that has been eliminated, please enter the space on the DMR for that parameter only with "NODI-9" (No Discharge Indicator Code #9). This code means monitoring is conditional or not required this monitoring period.

3. When your new permit includes parameters for which monitoring was not previously required, and coding has not caught up on the DMRs, there will not be any space on the DMR identified for those parameters. In that case, please fill out an extra sheet of paper with the facility name and permit number, along with all of the information normally required for each parameter (parameter code, data, frequency of analysis, sample type, and number of exceedances). Each data point should be identified as monthly average, weekly average, daily max, etc. and the units of measurement such as mg/L or lb/day. Staple the extra sheet to the DMR so that the extra data stays with the DMR form. Our data entry staff cannot enter the data for the new parameters until the PCS coding catches up. When the PCS coding does catch up, our data entry staff will have the data right at hand to do the entry without having to take the extra time to seek it from your inspector or from you.

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

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

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF OLD ORCHARD BEACH	) MAINE POLLUTANT DISCHARGE
PUBLICLY OWNED TREATMENT WORKS	) ELIMINATION SYSTEM PERMIT
OLD ORCHARD BEACH, YORK COUNTY	) AND
#ME0101524	) WASTE DISCHARGE LICENSE
#W002786-5L-D-R **APPROVAL**	) **RENEWAL**

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

APPLICATION SUMMARY

The applicant has applied to the Department for renewal of Waste Discharge License (WDL) #W002786-5L-C-R, which was issued on April 13, 2000 and is scheduled to expire on April 13, 2005. The April 13, 2000, WDL authorized the monthly average discharge of up to 3.5 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to the Atlantic Ocean at Saco Bay, Class SB, in Old Orchard Beach, Maine.

On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. From this point forward, the program will be referred to as the Maine Pollutant Discharge Elimination System (MEPDES) permit program, and permit #ME0101524 (same as NPDES permit number) will be utilized as the primary reference number for the OOB facility.

PERMIT SUMMARY

This permitting action is similar to the 4/13/00 licensing action in that it is:

1. Carrying forward the monthly average discharge flow limitation of 3.5 MGD;

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

3. Carrying forward the daily maximum technology-based concentration limitation for settleable solids;

4. Carrying forward the monthly average and daily maximum water quality-based concentration limitations for fecal coliform bacteria;

5. Carrying forward the daily maximum and monthly average water quality-based concentration limitations for total residual chlorine (TRC);

6. Carrying forward a whole effluent toxicity (WET) and chemical-specific (priority pollutant) screening level testing requirement during the last year of the effective term of this permit; and

7. Carrying forward the minimum monitoring frequency requirements for all monitored parameters.

This permitting action is different from the 4/13/00 licensing action in that it is

1. Establishing a requirement for a 30-day average minimum of 85% removal of BOD_5 and TSS;

2. Revising the pH range limitation from 6.0 to 8.5 standard units (SU) to 6.0 to 9.0 SU;

3. Requiring the submission of a new or revised Wet Weather Management Plan for Department review and approval; and

4. Requiring the submission of a current written comprehensive Operation & Maintenance (O&M) Plan.

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated March 2, 2005, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, 38 M.R.S.A. §464(4)(F), will be met, in that:

   (a) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   (b) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

   (c) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

   (d) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification that higher water quality will be maintained and protected; and

   (e) Where a discharge will result in lowering the existing water quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the above noted application of the TOWN OF OLD ORCHARD BEACH to discharge a monthly average of up to 3.50 MGD of secondary treated sanitary wastewater to Saco Bay in the Atlantic Ocean, Class SB, in Old Orchard Beach, Maine, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations including:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised July 1, 2002, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. The expiration date of this permit is five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 19TH DAY OF APRIL, 2005.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for
DAWN R. GALLAGHER, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 2, 2005
Date of application acceptance: March 7, 2005

FILED
APR 22 2005
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

Date filed with Board of Environmental Protection: _____.

This Order prepared by David Silver, BUREAU OF LAND & WATER QUALITY
#ME0101524 / #W002786-5L-D-R 19APR05

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date of this permit and lasting through permit expiration, the permittee is authorized to discharge **secondary treated sanitary wastewater from Outfall #001** to Saco Bay in the Atlantic Ocean. Such discharges shall be limited and monitored by the permittee as specified below[1]:

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]*	3.5 MGD *[03]*	---	---	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD_5 *[00310]*	876 lbs./day *[26]*	1,314 lbs./day *[26]*	1,460 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	3/Week *[03/07]*	24-Hour Composite *[24]*
BOD_5 Percent Removal[2] *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
TSS *[00530]*	876 lbs./day *[26]*	1,314 lbs./day *[26]*	1,460 lbs./day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	3/Week *[03/07]*	24-Hour Composite *[24]*
TSS Percent Removal[2] *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	5/Week *[05/07]*	Grab *[GR]*
Fecal Coliform Bacteria[3] *[31616]*	---	---	---	15/100 ml[4] *[13]*	---	50/100 ml *[13]*	3/Week *[03/07]*	Grab *[GR]*
Total Residual Chlorine[3] *[00665]*	---	---	---	0.56 mg/L *[19]*	---	0.88 mg/L *[19]*	2/Day *[02/01]*	Grab *[GR]*
pH *[00400]*	---	---	---	---	---	6.0 – 9.0 SU *[12]*	1/Day *[01/01]*	Grab *[GR]*

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

FOOTNOTES: See Pages 7 and 8 of this permit for applicable footnotes.

SPECIAL CONDITIONS

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

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

Whole Effluent Toxicity (WET) [5]	Daily Maximum	Minimum Frequency	Sample Type
Acute No Observed Effect Level (A-NOEL)			
Invertebrate-**Mysid Shrimp** (*Mysidopsis bahia*) *[TDA3E]*	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Vertebrate-**Inland Silverside** (*Menidia berrylina*) *[TDA6B]*	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Chronic No Observed Effect Level (C-NOEL)			
Invertebrate-**Sea Urchin** (*Arbacia punctulata*) *[TBH3A]*	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Vertebrate-**Inland Silverside** (*Menidia berrylina*) *[TBP6B]*	Report % *[23]*	2/Year *[02/YR]*	Composite *[24]*
Chemical-Specific[6] *[50008]*	Report ug/L *[28]*	1/Quarter *[01/90]*	Composite/Grab *[24/GR]*

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

FOOTNOTES: See Pages 7 and 8 of this permit for applicable footnotes.

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

FOOTNOTES:

1. **Monitoring –** All effluent monitoring shall be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Any change in sampling location must be approved by the Department in writing. Sampling and analysis must be conducted in accordance with: a) methods approved by 40 Code of Federal Regulations (CFR) Part 136; b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136; or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Services.

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

3. **Bacteria and TRC Limits –** Fecal coliform bacteria and total residual chlorine (TRC) limits and monitoring requirements are in effect year-round at the request of the Maine Department of Marine Resources in order to protect local shellfish resources near the outfall and to protect the health, safety and welfare of the public. It is noted that the TRC limits established are water quality based and not technology based because the facility still can achieve the bacteria limits without dechlorinating.

4. **Bacteria Reporting –** The monthly average fecal coliform bacteria limitation is a geometric mean limitation and sample results shall be reported as such.

5. **Whole Effluent Toxicity (WET) –** Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute (1.47%) and chronic (1.33%) water quality thresholds), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points.

   Beginning 12 months prior to permit expiration and lasting through permit expiration, the permittee shall conduct **screening level WET testing** at a minimum frequency of twice per year (2/Year). Acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*) and the inland silverside (*Menidia berrylina*). Chronic tests shall be conducted on the inland silverside (*Menidia berrylina*) and on the sea urchin (*Arbacia punctulta*). Results shall be submitted within 30 days of receiving the results from the laboratory conducting the testing.

SPECIAL CONDITIONS

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

FOOTNOTES:

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 time a WET test is performed.

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

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

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

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

Beginning 12 months prior to permit expiration and lasting through permit expiration, the permittee shall conduct **screening level chemical-specific testing** at a minimum frequency of once per calendar quarter (1/Quarter) in sequential calendar quarters. Chemical-specific testing shall be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, when applicable. Chemical-specific testing shall be conducted using methods that permit detection of a pollutant at existing levels in the effluent or that achieve minimum reporting levels of detection as specified by the Department. Results shall be submitted to the Department within thirty (30) days of the permittee receiving the data report from the laboratory conducting the testing. **For the purposes of Discharge Monitoring Report (DMR) reporting, enter a "1" for *yes*, *testing done this monitoring period* or "NODI-9" *monitoring not required this period.***

All mercury sampling shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.
2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.
3. The discharges shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.
4. Notwithstanding specific conditions of this permit the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. DISINFECTION

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

D. TREATMENT PLANT OPERATOR

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

E. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to the Department's Regional Office** such that the DMR's are received by the Department on or before the fifteenth (15th) day of the month following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the following address:

Department of Environmental Protection
Bureau of Land and Water Quality
312 Canco Road
Portland, Maine 04103

SPECIAL CONDITIONS

F. NOTIFICATION REQUIREMENT

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

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

G. LIMITATIONS FOR INDUSTRIAL USERS

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

H. UNAUTHORIZED DISCHARGES

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

I. WET WEATHER FLOW MANAGEMENT PLAN

The treatment facility staff shall develop and maintain a Wet Weather Management 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 October 1, 2005, the permittee shall submit to the Department for review and approval, a new or revised Wet Weather Management Plan that conforms to Department guidelines for such plans ***[PCS Code 06799]***. 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

On or before October 1, 2005, the permittee shall submit to the Department a current written comprehensive Operation & Maintenance (O&M) Plan ***[PSC Code 59199].*** The plan shall provide a systematic approach by which the permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

By December 31 of each year, or within 90 days of any process changes or minor equipment upgrades, the permittee shall evaluate and modify the O&M Plan including site plan(s) and schematic(s) for the wastewater treatment facility to ensure that it is up-to-date. The O&M Plan shall be kept on-site at all times and made available to Department and USEPA personnel upon request.

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

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

By December 31st of each calendar year ***(PCS Code 95799)***, 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.

SPECIAL CONDITIONS

L. DISPOSAL OF SEPTAGE WASTE IN WASTEWATER TREATMENT FACILITY

During the effective period of this permit, the permittee is authorized to receive **8,000 gallons per day** of septage into its waste water treatment facility subject to the following terms and conditions:

1. This approval is limited to methods and plans described in the application and supporting documents. Any variations are subject to review and approval prior to implementation.

2. At no time shall addition of septage cause or contribute to effluent quality violations. If such conditions do exist, receipt of septage shall be suspended until effluent quality can be maintained.

3. The permittee shall maintain records which shall include, as a minimum, the following by date: volume of septage received, source of the septage (name of municipality), the hauler transporting the septage, the dates and volume of septage added to the waste treatment influent and test results.

4. Additional septage shall not cause the treatment facilities design capacity to be exceeded. If, for any reason, the treatment facility becomes overloaded, receipt of septage shall be reduced or terminated in order to eliminate the overload condition.

5. Septage known to be harmful to the treatment processes shall not be accepted. Wastes which contain heavy metals, toxic chemicals, extreme pH, flammable or corrosive materials in concentrations harmful to the treatment operation shall be refused.

6. Holding tank waste water shall not be recorded as septage and should not be reported in the treatment facilities influent flow.

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

ATTACHMENT A

MARINE WHOLE EFFLUENT TOXICITY (WET) TEST REPORT

Facility _____ DEP License No _____ NPDES permit No _____

Contact person _____ Telephone No _____

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

Test type screening _____ surveillance _____ Dechlorinated? _____

Test required by: DEP/EPA _____

Results % effluent

	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		
	% survival	% fertilized	% survival		final wt (mg)
QC standard	A>90	>70	A>90	C>80	>0.50
lab control					
receiving water contrl					
conc. 1 (%)					
conc. 2 (%)					
conc. 3 (%)					
conc. 4 (%)					
conc. 5 (%)					
conc. 6 (%)					
stat test used					

place * next to values statistically different from controls

Reference toxicant

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

Salinity Adjustment

brine	
sea salt	
other	

Comments _____

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

signature _____ company _____

printed name _____ address _____

tel. no. _____

Report analytical chemistry on reverse side.

ANALYTICAL CHEMISTRY RESULTS
MARINE WATERS

Date collected _____ mm/dd/yy

Date analyzed _____ mm/dd/yy

Lab ID No. _____

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

Comments

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

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

signature _____ lab name _____

printed name _____ address _____

tel. no. _____

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE LICENSE

FACT SHEET

Date: March 2, 2005

MEPDES PERMIT: #ME0101524
WASTE DISCHARGE LICENSE: #W002786-68-E-R

NAME AND ADDRESS OF APPLICANT:

TOWN OF OLD ORCHARD BEACH
P.O. Box O
Old Orchard Beach, ME 04064

COUNTY: York

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Town of Old Orchard Beach
24 Manor Street
Old Orchard Beach, ME 04064

RECEIVING WATER / CLASSIFICATION: Atlantic Ocean at Saco Bay/Class SB

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. Chris White, Chief Operator
(207) 934-4416

1. APPLICATION SUMMARY

Application: The applicant has applied to the Department for renewal of Waste Discharge License (WDL) #W002786-5L-C-R, which was issued on April 13, 2000 and is scheduled to expire on April 13, 2005. The April 13, 2000 WDL authorized the monthly average discharge of up to 3.5 million gallons per day (MGD) of secondary treated sanitary wastewater from a publicly owned treatment works (POTW) to Saco Bay in the Atlantic Ocean, Class SB, in Old Orchard Beach, Maine.

2. PERMIT SUMMARY

a. Regulatory: On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (USEPA) to administer the National Pollutant Discharge Elimination System (NPDES) permit program in Maine, excluding areas of special interest to Maine Indian Tribes. On October 30, 2003, after consultation with the U.S. Department of Justice, the USEPA extended Maine's NPDES program delegation to all but tribally owned lands. In those areas, the Department maintains the authority to issue WDLs pursuant to Maine law. The extent of Maine's delegated authority is under appeal at the time of this permitting action. From this point forward, the program will be referred to as the Maine Pollutant Discharge Elimination System (MEPDES) program and permit #ME0101524 (same as NPDES permit number) will be utilized as the primary reference number for the Town of Old Orchard Beach (OOB) MEPDES permit. NPDES permit #ME0101524, last issued by the USEPA on May 4, 2000, will be replaced by the final MEPDES permit upon issuance. Once the MEPDES permit has been issued, all terms and conditions of the NPDES become null and void.

b. Facility History: This section provides a summary of significant licensing/permitting actions and milestones that have been completed for OOB.

July 8, 1994 -- The Department issued Waste Discharge License (WDL) #W002786-46-A-R to the Town of Old Orchard Beach authorizing the discharge of secondary treated effluent to Saco Bay in the Atlantic Ocean. The WDL expired on July 8, 1999.

April 13, 2000 -- The Department issued WDL #W002786-5L-C-R that renewed the authorization to discharge treated wastewater to Saco Bay in the Atlantic Ocean. WDL #W002786-5L-C-R expires on April 13, 2005.

June 20, 2000 – Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL #W002786-5L-C-R by establishing interim monthly average and daily maximum effluent concentration limits of 28.5 parts per trillion (ppt) and 42.8 ppt, respectively, and a minimum monitoring frequency requirement of 4 tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413 (11) specifying that interim mercury limits and monitoring requirements remain in effect. It is noted that the mercury effluent limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as the limits and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. The interim mercury limits remain in effect and enforceable and modifications to the limits and/or monitoring frequencies will be formalized outside of this permitting document pursuant to Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519.

March 7, 2005 -- The Town of Old Orchard Beach submitted an application to the Department requesting renewal of the authorization to continue discharging treated waste water effluent to Saco Bay.

2. PERMIT SUMMARY (cont'd)

c. Source Description: The Town of Old Orchard Beach (OOB) operates a municipal wastewater treatment facility located on Manor Street in Old Orchard Beach, Maine for the treatment of sanitary wastewater generated by commercial and residential users in OOB. OOB is a tourist community. The population served by the facility is estimated to be approximately five (5) times greater during the peak summer season when compared to the winter season. There are no significant industrial users contributing flows to the treatment works and the facility is not required to implement a formal pretreatment program. There are no combined sewer overflow (CSO) points associated with the collection system. The OOB treatment facility is currently authorized to accept and introduce into the treatment works up to 8,000 gallons per day of septage from local haulers based on a septage management plan that was previously submitted to the Department. A map showing the location of the treatment facility and the receiving waters is included as an Attachment to the Fact Sheet.

d. Wastewater Treatment:

Preliminary treatment occurs at the West Grand Pump station prior to the headworks. At this pump station, all waste water travels through a comminuter in order to macerates any larger sized solids. Grit is also removed in a cyclonic flow grit separator chamber. Further grit removal is accomplished at the headworks in a dedicated grit channel where the heavier solids are allowed to settle from suspension in the waste water flow. Primary treatment is accomplished in five (5) rectangular primary clarifiers (each with a capacity of 0.1 million gallons (MG). Secondary treatment is provided by a two chamber aeration basin that has a capacity of 0.6 MG followed by two 75 foot diameter clarifiers (one of which was constructed in 2002). Secondary treated waste water effluent is chlorinated in two disinfection tanks that have a capacity of 0.15 MG. The disinfected waste water is pumped to an outfall pipe that has a diameter of 24 inches. The effluent is discharged to Saco Bay in the Atlantic Ocean through a diffuser that is located 3,100 feet from the shoreline and is at a depth of 20 feet below mean low water level.

Primary sludge generated by the treatment process is stored in an on-site storage tank that has a working volume of 0.076 MG and secondary sludge is storage in a tank that has a capacity of 0.28 MG. The secondary and primary sludges are blended on-site in a "day-tank" with a capacity of 0.061 MG prior to dewatering. Sludge is dewatered by a 2.2 meter belt filter press and hauled to the town's composting facility. Two 1.5 meter belt filter presses are maintained at the facility for backup and contingency uses.

Off-line infrastructure includes two 0.24 MG aeration basins and two rectangular secondary clarifiers of 0.11 MG each. These components can be used in the treatment process in order to provide redundancy for the treatment process or to store excess flow during wet weather or during storm events.

3. CONDITIONS OF PERMIT

Maine law, 38 M.R.S.A. §414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A. §420, and Department Rule Chapter 530.5, *Surface Water Toxics Control Program,* require the regulation of toxic substances at the levels set forth for Federal Water Quality Criteria as published by the U.S. Environmental Protection Agency pursuant to the Clean Waters Act.

4. RECEIVING WATER QUALITY STANDARDS

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

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2002 Integrated Water Quality Monitoring and Assessment Report, prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, lists the marine waters at the beach of OOB (Waterbody #811-1) as, *"Category 3: Estuary and Marine Waters With Insufficient Data Or Information To Determine If Designated Uses Are Attained."* Attainment in this context is in regard to the designated use of harvesting of shellfish. Currently, portions of the Maine Department of Marine Resources shellfish harvesting area #C9 around the treatment plant outfall are closed to the harvesting of shellfish due to insufficient (limited) ambient water quality data to meet the standards in the National Shellfish Sanitation Program. Compliance with the fecal coliform bacteria limits in this permitting action and year-round disinfection ensures that the discharge from the OOB wastewater treatment facility will not cause or contribute to the shellfish harvesting closure. The shellfish closure area and conditionally approved area are identified on the map included as an Attachment to the Fact Sheet.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Flow: The previous licensing action established a monthly average discharge flow limitation of 3.50 MGD and continuous recorder monitoring requirement, which is being carried forward in this permitting action as it remains representative of the design capacity of the treatment works.

b. Dilution Factors: Department rule, 06-096 CMR Chapter 530.5(D)(3)(b), *Surface Water Toxics Control Program*, states that, *"for discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE or CORMIX."* Based on the location and configuration of the outfall pipe, the Department has determined that the dilution factors associated with the discharge from OOB are as follows:

Acute = 68:1 Chronic = 75:1 Harmonic Mean[1] = 225:1

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 U.S. EPA publication, *"Technical Support Document for Water Quality-Based Toxics Control"* (Office of Water; EPA/505/2-90-001, page 88), and represents an estimation of harmonic mean flow on which human health dilutions are based in a riverine 7Q10 flow situation.

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

c. Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS): The previous licensing action established monthly average and weekly average BOD_5 & TSS concentration limits of 30 mg/L and 45 mg/L, respectively, which were based on secondary treatment requirements of the Clean Water Act of 1977 §301(b)(1)(B) as defined in 40 CFR 133.102 and Department rule, Chapter 525(3)(III). The previous licensing action also established daily maximum BOD_5 & TSS concentration limits of 50 mg/L based on a Department best professional judgement (BPJ) of best practicable treatment (BPT), and a minimum monitoring frequency requirement of three times per week. All three technology-based concentration limits are being carried forward in this permitting action. Department rule Chapter 523(6)(f) states that all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass. The previous licensing action established daily maximum, weekly average and monthly average maximum technology-based mass limits of 1,460 lbs./day, 1,314 lbs./day, and 876 lbs./day, respectively, which are being carried forward in this permitting action and were derived as follows:

Monthly Average Mass Limit: (30 mg/L)(8.34 lbs./gallon)(3.5 MGD) = 876 lbs./day
Weekly Average Mass Limit: (45 mg/L)(8.34 lbs./day)(3.5 MGD) = 1,314 lbs./day
Daily Maximum Mass Limit: (50 mg/L)(8.34 lbs./day)(3.5 MGD) = 1,460 lbs./day

This permitting action is also establishing a new requirement for a 30-day average minimum of 85% removal of BOD_5 & TSS pursuant to Chapter 525(3)(III)(a)(3) and (b)(3) of the Department's rules.

This permitting action is carrying forward the minimum monitoring frequency requirement of three times per week (3/Week) based on Department guidance for POTWs permitted to discharge between 1.5 and 5.0 MGD.

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

e. Fecal Coliform Bacteria: The previous licensing action established year round monthly average and daily maximum water quality-based concentration limits for fecal coliform bacteria of 15 colonies/100 ml (geometric mean) and 50 colonies/100 ml (instantaneous level), respectively, based on the National Shellfish Sanitation Program and a minimum monitoring frequency requirement of three times per week. This permitting action is carrying forward both water quality-based concentration limits based on the National Shellfish Sanitation Program and the minimum monitoring frequency requirement of three times per week (3/Week) based on Department guidance for POTWs permitted to discharge between 1.5 and 5.0 MGD. Pursuant to a request from the Maine Department of Marine Resources, disinfection is required year-round in order to ensure compliance with fecal coliform bacteria limits and thereby providing for the protection of local shellfish resources.

f. Total Residual Chlorine (TRC): The previous licensing action established daily maximum and monthly average water quality-based concentration limitations of 0.88 mg/L and 0.56 mg/L, respectively, and a minimum monitoring frequency requirement of twice per day for TRC. Department licensing/permitting actions impose the more stringent of either a water quality-based or BPT based limit. End-of-pipe water quality based concentration thresholds may be calculated as follows:

Acute (A) Criterion	Chronic (C) Criterion	A & C Dilution Factors	Calculated Acute Threshold	Calculated Chronic Threshold
0.013 mg/L	0.0075 mg/L	68:1 (A) 75:1 (C)	0.88 mg/L	0.56 mg/L

The Department has established a daily maximum BPT limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine-based compounds. For facilities that must dechlorinate the effluent in order to consistently achieve compliance with water quality based thresholds, the Department has established daily maximum and monthly average BPT limits of 0.3 mg/L and 0.1 mg/L, respectively. The OOB wastewater treatment process does not include effluent dechlorination following disinfection because of the ability to consistently achieve compliance with water quality based thresholds without dechlorination. Therefore, this permitting action is carrying forward the daily maximum and monthly average water quality-based concentration limits of 0.88 and 0.56 mg/L, respectively, and minimum monitoring frequency of twice per day (2/Day) based on Department guidance for POTWs permitted to discharge between 1.5 and 5.0 MGD. In the event OOB is unable to maintain TRC concentrations in the future, the Department anticipates that OOB may need to install a dechlorination system in the future. OOB has alarms on the disinfection process to warn operators of failures. The facility shall notify the Department in the event of a failure of the disinfection system within twenty-four hours of the observation of the failure. The facility shall also notify the Department of Marine Resources within two hours of the failure of the disinfection system in order to facilitate evaluation of the adjacent shellfish harvesting area and also to local authorities (such as the town health office, police or fire department) in order to protect recreation activities in the vicinity. Notification to the Department of Marine Resources shall be to Public Health Water Quality Personnel.

g. pH: The previous licensing action established a pH range limit of 6.0 – 8.5 standard units (SU), which was based on a Department BPJ determination of BPT for secondary treated wastewater at that time, and a minimum monitoring frequency requirement of once per day. Pursuant to a new Department rule found at Chapter 525(3)(III)(c), this permitting action is revising the pH range limitation to 6.0 – 9.0 SU, which is now considered BPT for secondary treated wastewater. This permitting action is carrying forward the minimum monitoring frequency requirement of once per day (1/Day) based on Department guidance for POTWs permitted to discharge between 1.5 and 5.0 MGD.

h. Whole Effluent Toxicity (WET) and Chemical-Specific Testing: Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department rule, 06-096 CMR Chapter 530.5, *Surface Water Toxics Control Program*, set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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

WET monitoring is required to assess and protect against impacts upon water quality and designated uses caused by the aggregate effect of the discharge on specific aquatic organisms. Acute WET tests are performed on invertebrate species mysid shrimp (*Mysidopsis bahia*) and vertebrate species inland silverside (*Menidia beryllina*). Chronic WET tests are performed on sea urchin (*Arbacia punctulata*) and inland silverside. Chemical-specific monitoring is required to assess the levels of individual toxic pollutants in the discharge, comparing each pollutant to acute, chronic, and human health water quality criteria.

Pursuant to criteria established in Department rule Chapter 530.5, OOB has been placed in the medium frequency category for WET testing, as the facility has a dilution ratio of greater than 20:1, but less than 100:1 and in the high frequency category for chemical-specific testing, as the facility is permitted to discharge more than 1.0 MGD.

The previous licensing action established the WET and chemical-specific testing requirements for the OOB in accordance with the Maine Department of Environmental Protection guidance entitled, *Toxicity Program Implementation Protocols*, July 1998 and Department rule Chapter 530.5(B)(7)(c). The previous licensing action established screening level (during the last year of the effective term of the license only) WET testing at a minimum frequency of twice per year and screening level chemical-specific testing at a minimum frequency of four times per year.

A review of the WET and chemical-specific test results on file with the Department indicates that OOB has fulfilled Chapter 530.5 testing requirements established in WDL #W002786-5L-C-R. See Attachment C of this Fact Sheet for a summary of the WET test results and Attachment D of this Fact Sheet for a summary of the chemical-specific test dates. Department rule Chapter 530.5 and Protocol E(1) of the *Toxicity Program Implementation Protocols* states that statistical evaluations shall be periodically performed on the most recent 60 months of WET and chemical-specific data for a given facility to determine if water quality based limitations must be included in the permit.

On December 22, 2004, the Department performed a statistical evaluation on the aforementioned tests results in accordance with the statistical approach outlined in the USEPA's March 1991 document entitled, *Technical Support Document (TSD) for Water Quality Based Toxics Control*, Chapter 3.3.2, and with the *Toxicity Program Implementation Protocols*.

The 12/22/04 statistical evaluation indicates that the discharge does not exceed or have a reasonable potential (RP) to exceed acute, chronic, or human health critical ambient water quality thresholds or any ambient water quality criteria (AWQC) or chemical specific parameters for any of the WET species tested to date.

The Department has made the determination that OOB qualifies for the WET and chemical-specific testing reduction pursuant to Department rule Chapter 530.5(B)(7)(c) and has therefore made a BPJ determination to carry forward the reduction in WET and chemical-specific testing to a screening level of testing. Therefore, this permitting action is carrying forward the screening level WET testing requirement and minimum monitoring frequency requirement of twice per year (2/Year) and the screening level chemical-specific testing requirement and minimum monitoring frequency requirement of once per calendar quarter (1/Quarter) in the 12-month period prior to the expiration date of the permit.

In the interim, no surveillance level testing is required. In accordance with Department rule Chapter 530.5(B)(7)(c) and Special Condition K of this permit, *Chapter 530.5(B)(7(c)(iii) Certification*, **the permittee must annually submit to the Department a written statement evaluating its current status for each of the four conditions listed in Special Condition K of this permit.**

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

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

8. PUBLIC COMMENTS

Public notice of this application was made in the a newspaper with circulation in the area of the discharge on or about March 7, 2005. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

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

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

10. RESPONSE TO COMMENTS

During the period of March 2, 2005 through final agency action, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System Permit to be issued to OOB for the proposed discharge. During this period, the Department received no significant comments on the proposed draft permit, therefore a response to comments section was not prepared.

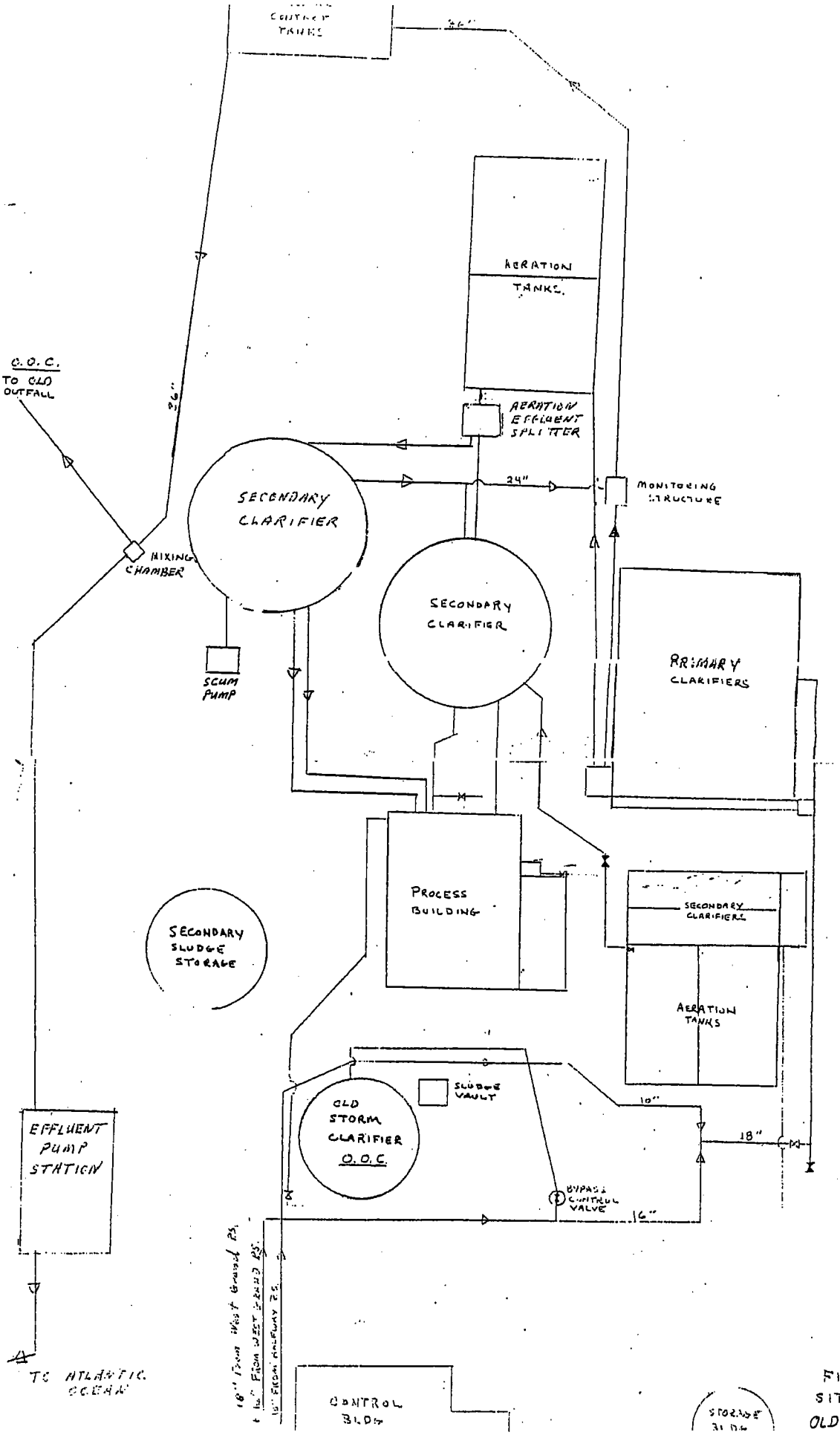
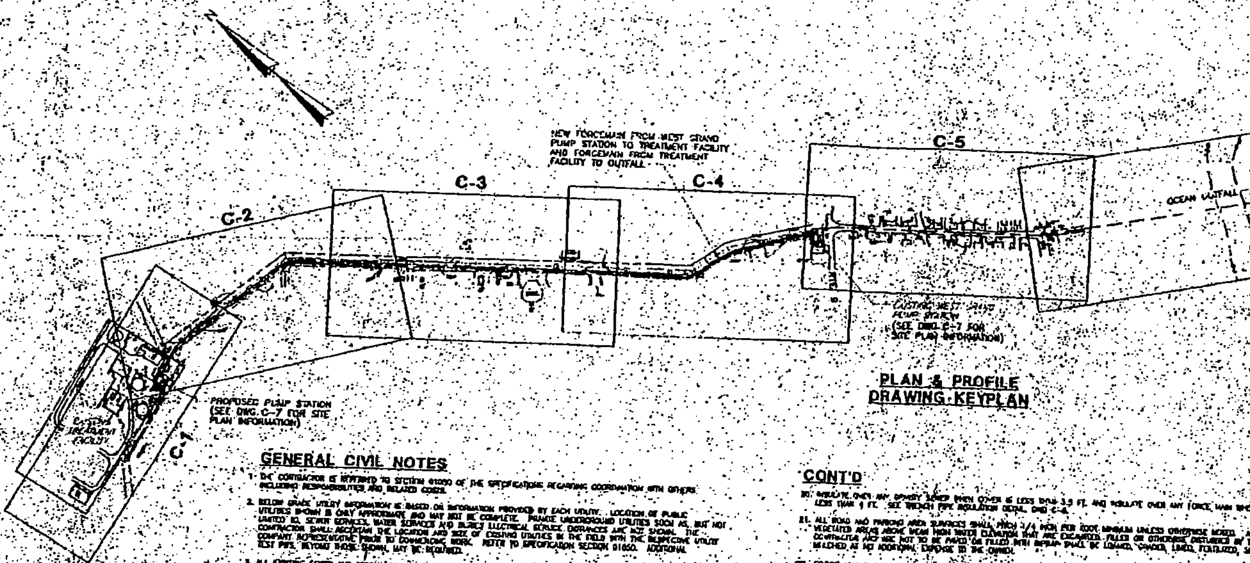


FIGURE 1
SITE PLAN
OLD ORCHARD BEA.
W.P.C.F.



PLAN & PROFILE DRAWING KEYPLAN

GENERAL CIVIL NOTES

1. THE CONTRACTOR IS REFERRED TO SECTION 01050 OF THE SPECIFICATIONS REGARDING COORDINATION WITH OTHERS INCLUDING RESPONSIBILITIES AND RELATED COSTS.
2. BELOW GRADE UTILITY INFORMATION IS BASED ON INFORMATION PROVIDED BY EACH UTILITY. LOCATION OF PUBLIC UTILITIES SHOWN IS ONLY APPROXIMATE AND MAY NOT BE COMPLETE. PRIVATE UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO, SEWER SERVICES, WATER SERVICES AND BURIED ELECTRICAL SERVICE DISTANCES ARE NOT SHOWN. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING UTILITIES IN THE FIELD WITH THE RESPECTIVE UTILITY COMPANY REPRESENTATIVE PRIOR TO COMMENCING WORK. REFER TO SPECIFICATION SECTION 01050. ADDITIONAL TEST PITS, BEYOND THOSE SHOWN, MAY BE REQUIRED.
3. ALL EXISTING SEWER AND STORM DRAIN LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE. ANY EXISTING SEWERS, STORM DRAIN LINES OR CULVERTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER, EXCEPT WHEN THE EXISTING UTILITY IS IN DIRECT CONFLICT WITH THE NEW SEWER AND THE EXISTING UTILITY IS NOT SHOWN OR INDICATED.
4. THE CONTRACTOR MAY ENCOUNTER ASBESTOS CEMENT PIPE DURING EXECUTION OF THE WORK. CONTRACTOR SHALL CONFORM TO ALL APPLICABLE PROVISIONS OF OSHA AND ALL OTHER FEDERAL, STATE AND LOCAL REGULATIONS WHEN HANDLING AND/OR DISPOSING OF ASBESTOS CEMENT PRODUCTS. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR HANDLING AND/OR DISPOSAL OF ASBESTOS CEMENT PIPE.
5. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO THE TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. INJURY TO ANY SUCH STRUCTURES CAUSED BY, OR RESULTING FROM, THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.
6. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTIFICATION TO CENTRAL MAINE POWER OR NEW ENGLAND TELEPHONE, RESPECTIVELY. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES.
7. DO NOT SCALE DRAWINGS UNLESS OTHERWISE NOTED. WRITTEN DIMENSIONS AND STATIONING SHALL PREVAIL. TOPOGRAPHY BASED ON SURVEY CONDUCTED BY WRIGHT-PIERCE 1993 AND ON PRIOR WASTEWATER TREATMENT FACILITY CONSTRUCTION DOCUMENTS.
8. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL SIGNS IN ACCORDANCE WITH MDOT REQUIREMENTS.
9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRAFFIC FLOW AT ALL TIMES. THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN TO THE OWNER PRIOR TO COMMENCING CONSTRUCTION. THE LOCAL POLICE DEPARTMENT AND FIRE DEPARTMENT ARE TO BE NOTIFIED AT LEAST 24 HOURS IN ADVANCE OF ANY STREET CLOSING OR DETOUR. REFER TO SPEC. SECTION 01570.
10. THE OWNER WILL BE RESPONSIBLE FOR OBTAINING THE PERMITS LISTED IN SUPPLEMENTARY CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH PERMIT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION. A COPY OF ALL OBTAINED PERMITS ARE AVAILABLE FOR REVIEW AT THE OLD ORCHARD BEACH TOWN OFFICE. ALL OTHER PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
11. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RIGHTS OF WAY AND EASEMENTS. THE CONTRACTOR SHALL VERIFY THAT THE NECESSARY EASEMENTS HAVE BEEN SECURED BY THE OWNER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH EASEMENT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION. A COPY OF ALL RIGHTS-OF-WAY AND EASEMENTS ARE AVAILABLE FOR REVIEW AT THE OLD ORCHARD BEACH TOWN OFFICE.
12. ALL TEST PITS SHALL BE EXCAVATED PRIOR TO CONSTRUCTION LAYOUT AND RESULTS REPORTED TO ENGINEER FOR REVIEW FOR CONFORMANCE WITH PLANS. TEST PITS ARE REQUIRED WHERE SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. WHERE THE CONTRACTOR IS CONNECTING PROPOSED SEWERS TO EXISTING SEWERS, RESULTS OF TEST PITS DUG TO DETERMINE EXISTING SEWER ELEVATIONS AND LOCATIONS SHALL BE REPORTED TO THE ENGINEER. ADJUSTMENTS TO INVERTS, LENGTHS AND SLOPES OF PROPOSED SEWER MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED LINES AND STRUCTURES AS SHOWN ON THE DRAWINGS. THE LAYOUT PLAN SHALL BE REVIEWED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE HORIZONTAL ALIGNMENT OF THE NEW SEWERS AND FORCE MAINS MAY BE ADJUSTED IN THE FIELD SUBJECT TO PRIOR APPROVAL BY THE ENGINEER. ALL ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM. ORIENTATION IS GRID NORTH MAINE STATE PLANE COORDINATE SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL ELEVATION REFERENCE INFORMATION PRIOR TO USE IN CONSTRUCTION.
13. CONTRACTOR SHALL [illegible] CLEARING OPERATIONS. CLEARING AND GRUBBING SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02110. CLEARING LIMITS SHALL BE AS INDICATED ON THE DRAWINGS, BUT AT ALL TIMES WITHIN EXISTING ROAD RIGHTS-OF-WAY AND PROPERTY LINES ON STATE OR COUNTY-OWNED PROPERTY OR EASEMENTS. ALL GRUBBINGS ARE THE PROPERTY OF THE CONTRACTOR AND WILL BE DISPOSED OF AT A SITE PROVIDED BY THE CONTRACTOR IN COMPLIANCE WITH ALL STATE AND LOCAL LAWS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF EROSION. ALL DISTURBED EARTH SURFACES ARE TO BE STABILIZED IN THE SHORTEST PRACTICAL TIME AND TEMPORARY EROSION CONTROL DEVICES SHALL BE EMPLOYED UNTIL SUCH TIME AS ADEQUATE SOIL STABILIZATION HAS BEEN ACHIEVED. TEMPORARY STORAGE OF EXCAVATED MATERIAL IS TO BE IN A MANNER THAT WILL MINIMIZE EROSION. THE CONTRACTOR SHALL DISPOSE OF UNSUITABLE EXCAVATED MATERIAL AT A SITE PROVIDED BY HIM WHICH IS IN COMPLIANCE WITH ALL STATE AND LOCAL LAWS. MATERIALS AND METHODS USED FOR TEMPORARY EROSION CONTROL SHALL BE AS SPECIFIED IN THE "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PREPARED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND MAINE SOIL AND WATER CONSERVATION COMMISSION. REFER TO SPECIFICATION SECTION 02270.
15. COMPACTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION [illegible]. ANY SETTLEMENT OCCURRING WITHIN ONE YEAR OF SUBSTANTIAL COMPLETION OF THE PROJECT WILL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
16. OPEN TRENCHES IN THE ROADWAY MUST BE BACKFILLED AT THE END OF THE WORKDAY. OPEN TRENCHES OUTSIDE OF THE ROADWAY MAY BE LEFT OPEN IF THE CONTRACTOR PROVIDES ADEQUATELY SAFE BARRICADING AND LIGHTS. ALL APPLICABLE PROVISIONS OF OSHA AND ALL OTHER FEDERAL, STATE AND LOCAL REGULATIONS SHALL BE ADHERED TO.
17. CONTRACTOR SHALL CONTROL DUST TO A TOLERABLE LIMIT AS OUTLINED IN SPECIFICATION SECTION 01562. CONTRACTOR SHALL NOT TRACK OR SPILL EARTH AND DEBRIS ON PUBLIC STREETS OUTSIDE THE PROJECT AREA. STREETS OPENED TO THE PUBLIC SHALL BE KEPT SWEPT AND FREE OF DEBRIS.
18. WHENEVER PROPOSED STRUCTURES ARE LOCATED PARTLY WITHIN A PAVED AREA AND PARTLY IN A NON-PAVED AREA, A BITUMINOUS CONCRETE [illegible]

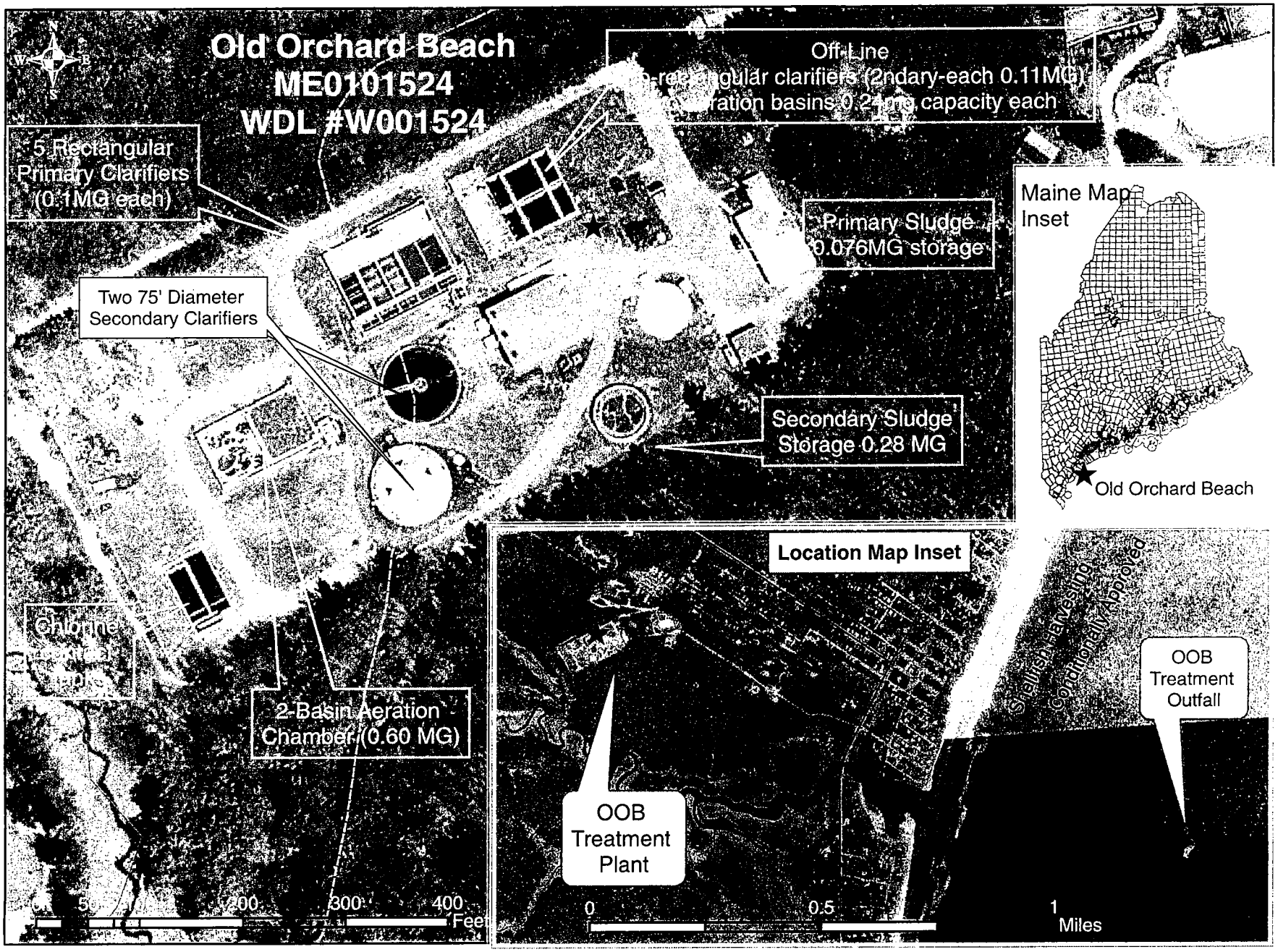
CONT'D

20. INSULATE OVER ANY GRAVITY SEWER WHEN COVER IS LESS THAN 3.5 FT. AND INSULATE OVER ANY FORCE MAIN WHEN COVER IS LESS THAN 4 FT. SEE TRENCH PIPE INSULATION DETAIL, DWG C-8.
21. ALL ROAD AND PARKING AREA SURFACES SHALL PITCH 1/4 INCH PER FOOT MINIMUM UNLESS OTHERWISE NOTED. ALL VEGETATED AREAS ABOVE MEAN HIGH WATER ELEVATION THAT ARE EXCAVATED, FILLED OR OTHERWISE DISTURBED BY THE CONTRACTOR AND ARE NOT TO BE PAVED OR FILLED WITH RIPRAP SHALL BE LOAMED, GRADED, LIMED, FERTILIZED, SEEDED AND MULCHED AT NO ADDITIONAL EXPENSE TO THE OWNER.
22. FORCE MAINS SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED ON THE DRAWINGS. NO CRESTS OR RELATIVE HIGH POINTS IN NEW PIPING WILL BE PERMITTED UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL BENDS SHALL BE SUITABLY RESTRAINED BY CAST-IN-PLACE CONCRETE THRUST BLOCKS. [illegible] BENDS WILL NOT BE ALLOWED IN THE FORCE MAINS.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTING ALL EXISTING PROPERTY MONUMENTATION THAT IS DISTURBED BY HIS OPERATIONS AT NO EXPENSE TO THE OWNER. THIS WORK IS TO BE DONE BY A LAND SURVEYOR REGISTERED IN THE STATE OF MAINE.
24. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
25. SEE APPENDIX A OF THE SPECIFICATIONS FOR BORING LOGS. THESE ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.
26. SUITABLE EXCAVATED MATERIALS MAY BE INCORPORATED INTO THE PROJECT. THE OWNER HAS THE RIGHT OF FIRST REFUSAL OF ALL EXCESS SUITABLE MATERIAL FROM THE PROJECT. THIS PROVISION SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS OBLIGATIONS TO REMOVE AND DISPOSE OF ANY MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING OR EXCESS SUITABLE MATERIAL UNWANTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF UNSUITABLE AND EXCESS MATERIAL IN ACCORDANCE WITH ALL STATE AND LOCAL LAWS.
27. ALL SEWER AND STORM DRAIN LINES NOTED TO BE PLUGGED SHALL BE PLUGGED WITH BRICK AND MORTAR OR OTHER METHOD AS APPROVED BY THE ENGINEER. ALL SEWER AND STORM DRAIN PLUGGING SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.
28. PROPOSED MANHOLE RIM ELEVATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND PROVIDED FOR GENERAL ESTIMATING ONLY.
29. A DROP STRUCTURE SHALL BE PROVIDED FOR ALL MANHOLES WHERE A SEWER ENTERING THE MANHOLE IS 24 INCHES OR MORE ABOVE THE INVERT OF THE OUTLET PIPE. WHEN THE DIFFERENCE IN ELEVATION IS LESS THAN 24 INCHES, THE MANHOLE INVERT SHALL BE CONSTRUCTED TO PROVIDE A SMOOTH TRANSITION THROUGH THE MANHOLE.
30. THE CONTRACTOR IS TO INSTALL PAVEMENT IN TRENCHES TO MATCH THE EXISTING ROAD GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE TO SHIM TRENCH PAVEMENT THAT HAS EXPERIENCED ANY SETTLEMENT WITHIN THE ONE YEAR WARRANTY PERIOD. FOR PAVEMENT DETAILS REFER TO DWG C-8.
31. THE CONTRACTOR SHALL NOTIFY RESIDENTS BY WRITTEN NOTICE IN ADVANCE OF WORKING IN AN AREA.
32. REFER TO DRAWING C-1 FOR A COMPLETE LIST OF ABBREVIATIONS.
33. REFER TO DRAWING C-7 FOR GENERAL SITE NOTES.
34. THE COSTS FOR TEST PITS SHOWN ON THE DRAWINGS SHALL BE INCLUDED IN THE BASE BID.
35. IN NON-PAVED ROADWAY, DRIVE, & R.O.W. AREAS WHERE NEW LINES BEING CONSTRUCTED, PROVIDE 10 FOOT WIDE AGGREGATE BASE ROADWAY WITH A [illegible] INCH DEPTH. MATCH TO EXISTING GRADES.
36. CONTRACTOR TO NOTE THAT THERE ARE SPECIAL CONSIDERATIONS REGARDING THE PUMP STATION AND FORCE MAIN EXCAVATIONS AND DEWATERING. REFERENCE THE GEOTECHNICAL EVALUATION IN THE SPECIFICATIONS.

CIVIL LEGEND

EXISTING / PROPOSED

- SURVEY CONTROL STATION
- IRON PIPE/STAKE
- DRILL HOLE
- FOUND WRIGHT-PIERCE MONUMENT
- MONUMENT SET
- PROPERTY LINE
- EASEMENT LINE
- LIMIT OF WORK
- STONEWALL
- CHAIN LINK FENCE
- STOCKADE FENCE
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- CATCH BASIN
- SEWER GATE VALVE
- HYDRANT
- YARD HYDRANT
- WATER SHUTOFF VALVE
- WATER VALVE
- UTILITY POLE
- GUY WIRE
- UTILITY POLE w/ LIGHT
- LIGHT POLE
- BOLLARD
- DECIDUOUS TREE
- TREE LINE
- CONTOUR
- HAY BALES
- PAVEMENT
- GRAVEL
- FILL REQUIRED
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- SANITARY GRAVITY SEWER
- SANITARY SEWER FORCE MAIN
- WATER MAIN
- STORM DRAIN
- UNDERGROUND ELECTRIC
- INDICATES SPOT ELEVATION
- TEST PIT
- BORING


Old Orchard Beach
ME0101524
WDL #W001524
Off-Line
rectangular clarifiers (2ndary-each 0.11MG)
ration basins 0.24MG capacity each
5 Rectangular Primary Clarifiers (0.1MG each)
Primary Sludge 0.076MG storage
Two 75' Diameter Secondary Clarifiers
Secondary Sludge Storage 0.28 MG
Maine Map Inset
Old Orchard Beach
Chlorine
2-Basin Aeration Chamber (0.60 MG)
0 100 200 300 400 Feet
Location Map Inset
Shellfish Harvesting Conditionally Approved
OOB Treatment Outfall
OOB Treatment Plant
0 0.5 1 Miles