AUTHORIZATION TO DISCHARGE UNDER CLEAN WATER ACT SECTION 301 (h)
MODIFIED NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §1251 et seq.; the "CWA"), and Title 38 Maine Revised Statutes § 414-A et seq.,

City of Eastport –ME0100200

is authorized to discharge from a facility located at

Main Wastewater Treatment Facility
County Road
Eastport, Maine

to receiving water named

Passamaquoddy Bay, Class SC

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This NPDES permit shall become effective on the date of signature by the Director of the EPA Office of Ecosystem Protection.

This waste discharge license (WDL) shall become effective on the date of signature by the Commissioner of the Maine Department of Environmental Protection.

Both the NPDES permit and WDL and the authorization to discharge to the waters of the United States shall expire concurrently at midnight, five (5) years from the date of signature by the Director of the EPA Office of Ecosystem Protection.

This permit supersedes the NPDES permit/WDL issued on August 13, 2002. This permit consists of the *Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits* (last revised July 1, 2002), *EPA NPDES Part II Standard Conditions (January 2007)* copies attached, and the attached Special Conditions, including effluent limitations and monitoring requirements.

Signed this 12th day of November, 2008

Signature on file

Stephen S. Perkins, Director
Office of Ecosystems Protection
Environmental Protection Agency
Boston, Massachusetts

Signed this 18th day of November, 2008

Signature on file

David P. Littell, Commissioner
Maine Department of Environmental Protection
Augusta, Maine

IN THE MATTER OF

CITY OF EASTPORT	)	PROTECTION AND IMPROVEMENT
EASTPORT, WASHINGTON COUNTY, ME.	)	OF WATERS
PUBLICLY OWNED TREATMENT WORKS	)	
ME0100200 **MAIN PLANT**	)	WASTE DISCHARGE LICENSE
W002598-5L-E-R **APPROVAL**	)	**RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et seq., and 38 M.R.S.A., Section 414-A et seq., and applicable regulations, the U.S. Environmental Protection Agency (EPA hereinafter) and the Maine Department of Environmental Protection (Department hereinafter) have considered the application of the CITY OF EASTPORT (City hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The City has applied for renewal of a combined Section 301(h) Modified National Pollutant Discharge Elimination System (NPDES) permit #ME0100200 and Maine Waste Discharge License (WDL) #W002598-5L-C-R, that was issued on August 13, 2002 and expired on August 13, 2007. The permit/license (permit hereinafter) approved the discharge of up to a monthly average flow of 0.82 million gallons per day (MGD) of primary treated sanitary wastewater to Passamaquoddy Bay, Class SC, in Eastport, Maine.

PERMIT SUMMARY

This permitting action is similar to the previous permitting action in that it carries forward;

1. The monthly average flow limitation of 0.82 MGD.

2. The monthly average technology based requirements to achieve a minimum of 30% removal of biochemical oxygen demand (BOD) and a minimum of 50% removal for total suspended solids (TSS).

3. The monthly average technology based mass limitations for BOD and TSS.

4. The daily maximum concentration reporting requirement for settleable solids.

5. The year-round monthly average (geometric mean) and daily maximum water quality based concentration limits of 15 colonies/100 ml and 50 colonies/100 ml for fecal coliform bacteria.

6. The daily maximum water quality based concentration limit of 0.18 mg/L for total residual chlorine.

7. The technology based pH range limitation of 6.0 -9.0 standard units but reducing the monitoring frequency from 1/Day to 1/Week.

PERMIT SUMMARY (cont'd)

This permitting action is different than the previous permitting action in that it is;

1. Eliminating the monthly average concentration reporting requirement for settleable solids and reducing the monitoring frequency to 1/Week.

2. Eliminating the requirement to report influent BOD and TSS data on the monthly Discharge Monitoring Repott (DMR). Influent values for both parameters shall continue to be reported on the monthly "49-Form" submitted to the Department.

3. Establishing technology based monthly average concentration limits for BOD and TSS.

4. Establishing whole effluent toxicity (WET) testing and chemical specific testing requirements pursuant to a revised Department rule, Chapter 530, Surface Water Toxics Control Program, promulgated on October 12, 2005.

CONCLUSIONS

BASED on the findings in the Fact Sheet dated August 18, 2008, and subject to the conditions listed below, the USEPA and the Department make 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 receiving 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;

CONCLUSIONS (cont'd)

(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 EPA and the Department APPROVE the above noted application of the CITY OF EASTPORT, to discharge up to a monthly average of 0.82 MGD of primary treated wastewaters to Passamaquoddy Bay, Class SC, in Eastport, 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 Special Conditions on the following pages.

3. This Maine waste discharge license expires five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS _____DAY OF _____, 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
David P. Littell, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: August 21, 2007.

Date of application acceptance: September 4, 2007.

Date filed with Maine Board of Environmental Protection _____

This order prepared by GREGG WOOD, Bureau of Land & Water Quality
Eastportmain2007 10/1/07

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge treated primary treated sanitary wastewaters from **Outfall 001** to Passamaquoddy Bay and must monitor and limit discharges as follows:

Effluent Characteristic	**Discharge Limitations**				**Monitoring Requirement**	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	820,000 gpd *[07]*	---	---	---	Continuous *[99/99]*	Recorder *[RC]*
BOD *[00310]*	1,388 lbs/day *[26]*	Report lbs/day *[26]*	203 mg/L *[19]*	Report, mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
BOD % Removal **(1)** *[50076]*	---	---	30 % *[23]*	---	1/Month *[01/30]*	Calculate*[CA]*
TSS *[00530]*	991 lbs/day *[26]*	Report lbs/day *[26]*	145 mg/L *[19]*	Report, mg/L *[19]*	1/Week *[01/07]*	Composite *[24]*
TSS % Removal **(1)** *[81011]*	---	---	50 % *[23]*	---	1/Month *[01/30]*	Calculate*[CA]*
Settleable Solids *[00545]*	---	---	---	Report (ml/L) *[25]*	1/Week *[01/07]*	Grab *[GR]*
Fecal Coliform Bacteria *(Year-round) [31615]*	---	---	15/100 ml**(2)** *[30]*	50/100ml *[30]*	1/Week *[01/07]*	Grab *[GR]*
Total Residual Chlorine *[50060]* **(3)**	---	---	---	0.18 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH (Std. Units) *[00400]*	The pH shall not be less than 6.0 or greater than 9.0 at any time.				1/Week *[01/07]*	Grab *[GR]*

The italicized numeric values bracketed in the table above are code numbers that Department personnel use to code the monthly Discharge Monitoring Reports (DMR's).

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

SURVEILLANCE LEVEL TESTING

Beginning upon issuance of this permit and lasting through 12 months prior to the expiration date of this permit.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	**Daily Maximum**	**Monthly Average**	**Daily Maximum**	**Measurement Frequency**	**Sample Type**
Whole Effluent Toxicity[4]						
Acute – NOEL *Mysidopsis bahia* *[TDM3E]* *(Mysid Shrimp)*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Chronic – NOEL *Arbacia punctulata* *[TBH3A]* *(Sea urchin)*	---	---	---	Report % *[23]*	1/Year *[01/YR]*	Composite *[24]*
Analytical chemistry[5] *[50008]*	---	---	---	Report ug/L *[28]*	1/Year *[01/YR]*	Composite/Grab *[24]*

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

SCREENING LEVEL TESTING

Beginning 12 months prior to the expiration date of this permit and lasting through permit expiration.

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Whole Effluent Toxicity(4) Acute – NOEL *Mysidopsis bahia* [TDM3E] *(Mysid Shrimp)*	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Chronic – NOEL *Arbacia punctulata* [TBH3A] *(Sea urchin)*	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Priority pollutant(6) [50008]	---	---	---	Report ug/L [28]	1/Year [01/YR]	Composite/Grab [24]
Analytical chemistry(5) [50008]	---	---	---	Report ug/L [28]	1/Quarter [01/90]	Composite/Grab [24]

The italicized numeric values in brackets in the tables above are not limitations but codes used by Department personnel to code monthly Discharge Monitoring Reports (DMRs).

SPECIAL CONDITIONS

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

Footnotes

Sampling – Sampling to demonstrate compliance with this permit shall be conducted after the last treatment process and shall be representative of normal operating conditions. All sampling must be conducted in accordance with (a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, (b) alternative methods approved by the both EPA and the Department in accordance with the procedures in 40 CFR Part 136, (c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services.

All detectable analytical test results shall be reported to the Department including results which are detected below the respective reporting limits (RLs) specified by the Department or as specified by other approved test methods. If a non-detect analytical test result is below the respective RL, the concentration result shall be reported as <Y where Y is the detection limit achieved by the laboratory for each respective parameter. Reporting a value of <Y that is greater than an established RL is not acceptable and will be rejected by the Department. For mass, if the analytical result is reported as <Y or if a detectable result is less than a RL, report a <X lbs/day, where X is the parameter specific limitation established in the permit.

1. **Percent removal** - The permittee shall achieve at least 30% removal for BOD and 50% removal for TSS. For the purposes of calculating a monthly average percent removal, the permittee shall use the measured influent concentration from the Middle Street pump station for both BOD and TSS.

2. **Fecal coliform bacteria** – Limitations and monitoring requirements are in effect on a year-round basis to protect the health, safety and welfare of the public. The monthly average limitation is a geometric mean limitation and results shall be reported as such.

3. **Total residual chlorine (TRC)** – Limitations and monitoring requirements for TRC are in effect whenever elemental chlorine or chlorine based compounds are utilized for disinfection or cleaning. TRC 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 Wastewater, (most current approved 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.

4. **Whole Effluent Toxicity (WET) Testing** – Definitive WET testing is a multi-concentration testing event (a minimum of five dilutions bracketing the critical acute and chronic thresholds of 7.1% and 0.29%, respectively), which provides a point estimate of toxicity in terms of No Observed Effect Level, commonly referred to as NOEL or NOEC. A-NOEL is defined as the acute no observed effect level with survival as the end point. C-NOEL is defined as the chronic no observed effect level with survival, reproduction and growth as the end points.

   a. **Surveillance level testing - Beginning upon issuance of this permit and lasting through 12 months prior to permit expiration**, the permittee shall conduct surveillance level WET testing at a minimum frequency of once per year using the mysid shrimp (*Mysidopsis bahia*) and the sea urchin (*Arbacia punctulata*). Acute tests shall be conducted on the mysid shrimp; chronic tests shall be conducted on the sea urchin. Surveillance tests shall be conducted in a different calendar quarter such that a test is conducted in all four calendar quarters during the first four years of the term of the permit.

   b. **Screening level testing - Beginning 12 months prior to permit expiration and lasting through permit expiration and every five years thereafter**, the permittee shall conduct screening level WET testing at a minimum frequency of once per year using the mysid shrimp and sea urchin.

      Test results must be submitted to both the Department and EPA not later than the next Discharge Monitoring Report (DMR) required by the permit, provided, however, that the permittee may review the toxicity reports for up to 10 business days of their availability before submitting them. The permittee shall evaluate test results being submitted and identify to the Department possible exceedences of the critical acute and chronic water quality thresholds of 7.1% and 0.29%, respectively.

   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. U.S. Environmental Protection Agency. 2002. *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, 5th ed. EPA 821-R-02-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the acute method manual)

   b. U.S. Environmental Protection Agency. 2002. *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, 3rd ed. EPA 821-R-02-014. U.S. Environmental Protection Agency, Office of Water, Washington, D.C., October 2002 (the marine chronic method manual)

Results of WET tests shall be reported on the "Whole Effluent Toxicity Report Marine Waters" form included as Attachment A of this permit each time a WET test is performed. The permittee is required to analyze the effluent for the analytical chemistry parameters specified on the "WET and Chemical Specific Data Report Form" form included as Attachment B of this permit each time a WET test is performed.

5. **Analytical Chemistry** – Refers to a suite of chemical tests that include ammonia nitrogen (as N), total aluminum, total arsenic, total cadmium, total chromium, total copper, total cyanide, total lead, total nickel, total silver, total zinc and total residual chlorine.

   a. **Surveillance level testing** – Beginning upon permit issuance and lasting through
   12 months prior to permit expiration, the permittee shall conduct analytical chemistry testing at a minimum frequency of once per year. Surveillance tests shall be conducted in a different calendar quarter such that a test is conducted in all four calendar quarters during the first four years of the term of the permit.

   b. **Screening level testing** – Beginning 12 months prior to and lasting through permit expiration and every five years thereafter, the permittee shall conduct analytical chemistry testing at a minimum frequency of once per calendar quarter for four consecutive calendar quarters.

6. **Priority Pollutant Testing –** Priority pollutant testing refers to analysis for levels of priority pollutants listed in Department rule 06-096 CMR Chapter 525 Section 4.VI.

   a. **Screening level testing** – Beginning 12 months prior to and lasting through permit expiration and every five years thereafter, the permittee shall conduct priority pollutant testing at a minimum frequency of once per year. Surveillance level priority pollutant testing is not required pursuant to Department rule 06-096 CMR Chapter 530 Section 2.D.

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

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

All mercury sampling (1/Quarter) required by this permit or required to determine compliance with interim limitations established pursuant to Department rule Chapter 519, shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry. See Attachment C, *Effluent Mercury Test Report*, of this permit for the Department's form for reporting mercury test results.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time or 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 uses designated by the classification of the receiving waters.

3. The discharge shall not cause visible discoloration or turbidity in the receiving waters which would impair the uses 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

Disinfection shall be used to reduce the concentration of bacteria to or below the level specified in Special Condition A, *Effluent Limitations and Monitoring Requirements*, of this permit. If chlorination and dechlorination are used as the means of disinfection, an approved chlorine disinfection system must be utilized.

The total residual chlorine in the effluent shall at no time cause any demonstrable harm to aquatic or marine life in the receiving waters. The final effluent concentration of total residual chlorine, prior to dechlorination if present, must at all times be maintained at a concentration greater than test method detection limits in order to provide effective reduction of bacteria to levels at or below those specified in Special Condition A, "*Effluent Limitation and Monitoring Requirements*."

D. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a minimum of a **Grade II** certificate (or Registered Maine Professional Engineer) 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 Forms (DMR's) provided by the Department and **shall be postmarked by the thirteenth (13th) day of the month or hand-delivered to a Department Regional Office such that the DMR's are received by the Department by the fifteenth (15th) day of the month following the completed reporting period.** A signed copy of the DMR's and all other reports required herein shall be submitted, unless otherwise specified, to the Department's facility inspector at following address:

Maine Department of Environmental Protection
Eastern Maine Regional Office
Bureau of Land & Water Quality
Division of Water Quality Management
106 Hogan Road
Bangor, Maine 04401

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director at the following address:

Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

F. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with:

1) the permittee's General Application for Waste Discharge Permit, accepted for processing on September 4, 2007;

2) the terms and conditions of this permit; and

3) 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.

G. NOTIFICATION REQUIREMENT

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

1. Any substantial change in the volume or character of pollutants being introduced into the wastewater collection and treatment system by a source introducing pollutants to the system at the time of permit issuance.

2. For the purposes of this section, adequate notice shall include information on:

   a The quality or quantity of wastewater introduced to the wastewater collection and treatment system; and

   b Any anticipated impact of the change in the quality or quantity of the wastewater to be discharged from the treatment system.

H. OPERATIONS AND MAINTENANCE 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.

I. WET WEATHER FLOW MANAGEMENT PLAN

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

The plan shall include operating procedures for a range of intensities, address solids handling procedures (including septage and other high strength wastes if applicable) and provide written operating and maintenance procedures during the events.

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

J. SLUDGE

The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices and with the CWA Section 405(d) technical standards.

The permittee shall comply with the more stringent of either the state or federal (40 CFR Part 503) requirements.

The requirements and technical standards of 40 CFR Part 503 apply to facilities which perform one or more of the following use or disposal practices.

a. Land application - the use of sewage sludge to condition or fertilize the soil

b. Surface disposal - the placement of sewage sludge in a sludge only landfill

c. Sewage sludge incineration in a sludge only incinerator

The 40 CFR Part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. These conditions also do not apply to facilities which do not dispose of sewage sludge during the life of the permit but rather treat the sludge (e.g., lagoons- reed beds), or are otherwise excluded under 40 CFR 503.6.

The permittee shall use and comply with the attached compliance guidance document to determine appropriate conditions. Appropriate conditions contain the following elements.

General requirements
Pollutant limitations
Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)
Management practices
Record keeping
Monitoring
Reporting

Depending upon the quality of material produced by a facility, all conditions may not apply to the facility.

The permittee shall monitor the pollutant concentrations, pathogen reduction and vector attraction reduction at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year:

less than 290	1/ year
290 to less than1500	1 /quarter
1500 to less than 15000	6 /year
15000 +	1 /month

The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR 503.8.

The permittee shall submit an annual report containing the information specified in the guidance by February 19. Reports shall be submitted to the address contained in the reporting section of the permit. Sludge monitoring is not required by the permittee when the permittee is not responsible for the ultimate sludge disposal. The permittee must be assured that any third party contractor is in compliance with appropriate regulatory requirements. In such case, the permittee is required only to submit an annual report by February 19 containing the following information:

- Name and address of contractor responsible for sludge disposal
- Quantity of sludge in dry metric tons removed from the facility by the sludge contractor

K. RE-OPENER CLAUSE

Upon evaluation of test results required by the Special Conditions of this permitting action, additional site specific information or any other pertinent information or test result obtained during the term of this permit, the Department and EPA may, at anytime, and with notice to the permittee, modify this permit to (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be

exceeded, (2) require additional monitoring if results on file are inconclusive, or (3) change the monitoring requirements and/or limitations based on new information.

L. SEVERABILITY

In the event that any provision or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect, and shall be construed and enforced in all respects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

M. SCHEDULES

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 EPA 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's compliance inspector for review and comment.

On or before December 1, 2008, ***[PCS Code 00701]***, the permittee shall submit to the Maine Department of Environmental Protection for review and approval, a public education program designed to minimize the entrance of non-industrial toxic pollutants and pesticides into the collection system and wastewater treatment facility.

On or before December 31, 2009, ***[PCS Code 53399]***, the permittee shall provide written notice to the Maine Department of Environmental Protection, that the approved public education program has been implemented.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Prepared Jointly by the Maine Department of Environmental Protection and the U.S. Environmental Protection Agency – New England Office

Date: **August 18, 2008**

PERMIT NUMBER: **ME0100200**
LICENSE NUMBER: **W002598-5L-E-R**

NAME AND ADDRESS OF APPLICANT:

CITY OF EASTPORT
78 High Street
Eastport, Maine 04631

COUNTY:

Washington County

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Main Wastewater Treatment Facility
County Road
Eastport, Maine 04631

RECEIVING WATER/CLASSIFICATION:

Passamaquoddy Bay/Class SC

COGNIZANT OFFICIAL AND TELEPHONE NUMBER:

Mr. James Barnes
Chief Operator
(207) 853-2332

1. APPLICATION SUMMARY

a. Application - The City has applied for renewal of a combined Section 301(h) modified National Pollutant Discharge Elimination System (NPDES) permit #ME0100200 and Maine Waste Discharge License (WDL) #W002598-5L-C-R, that was issued on August 13, 2002 and expired on August 13, 2007. The permit/license (permit hereinafter) approved the discharge of up to 0.82 million gallons per day (MGD) of primary treated sanitary wastewater to Passamaquoddy Bay, Class SC, in Eastport, Maine See Attachment A of this Fact Sheet for a location map.

b. Source Description: Sanitary wastewaters received at the treatment facility are generated by residential and commercial entities in the City of Eastport. The facility receives no flow from industrial sources. All CSOs have been eliminated from the collection system. The wastewater collection system consists of 10 miles of interceptor and collector sewers and six (6) submersible pump stations. The collection system has been upgraded over time and the newer sewer lines have reduced the quantity of infiltration and inflow (I&I). The collection system consists of a triplex submersible pump station at Middle Street, 2,400 linear feet of 10-inch diameter force main to the treatment plant and 3,200 feet of gravity outfall sewer to Passamaquoddy Bay. The Middle Street pump station includes a bar rack, gas detection system, wet well, pumps and piping, valve pit, control panel and stand-by emergency generator (housed in a building).

c. Wastewater Treatment: The City treatment facility provides a primary level of treatment and consists of (1) screening and grit removal, (2) two primary treatment Imhoff tanks (3) prechlorination (if needed), (4) chlorination and dechlorination, (5) effluent flow metering, (6) sampling of effluent quality, (7) sludge removal, mixing, drying and stabilization (8) lime, polymer and potassium permanganate chemical addition facilities, and a Control Building. The treated effluent is discharged to Passamaquoddy Bay by way of a twenty four (24) inch diameter pipe that is submerged at mean low water.

Wastewater enters the treatment plant through a 10 inch diameter force main to an influent channel to the screening and grit removal facilities. Following screening and grit removal the wastewater is conveyed by gravity to a weir controlled flow splitting structure which controls flow into the two Imhoff treatment tanks. The sludge and scum are stored in the lower compartment of the tank for anaerobic digestion and then seasonally disposed of by liquid sludge land application or dewatered in the on-site drying beds and either land filled or sent to another appropriate facility for further treatment and disposal. The wastewater flows from the Imhoff tanks to the chlorine contact tank for disinfection. The wastewater is disinfected by the addition of chlorine in a mixing chamber at the head end of the contact tank. The wastewater is dechlorinated at the tail end of the chlorine contact tank in another mixing chamber. Effluent flow is monitored and sampled prior to discharge to Passamaquoddy Bay via the ocean outfall. See Attachment B of this Fact Sheet for a schematic of the wastewater treatment processes.

2. PERMIT SUMMARY

a. Regulatory - On January 12, 2001, the State of Maine received authorization from the U.S. Environmental Protection Agency (EPA) to administer the NPDES program in Maine. Section 301(h) of the Clean Water Act provides a vehicle by which a permittee may request a variance from secondary treatment requirements. Issuance of a permit granting such a variance may only be issued by the EPA as authorization to do so was not granted to the State of Maine on January 12, 2001. See section 2(c) of this Fact Sheet. In addition, pursuant to Maine law, anyone discharging pollutants to waters of the State must obtain a license to do so. Therefore, this document serves as a combination modified NPDES permit and a Maine WDL to satisfy both federal and state requirements. The EPA has authorized the Maine Department of Environmental Protection (Department) to take the lead role in drafting the permit/license.

b. Terms and conditions - This permitting action is similar to the previous permitting action in that it carries forward;

1. The monthly average flow limitation of 0.82 MGD.

2. The monthly average technology based requirements to achieve a minimum of 30% removal of biochemical oxygen demand (BOD) and a minimum of 50% removal for total suspended solids (TSS).

3. The monthly average technology based mass limitations for BOD and TSS.

4. The daily maximum concentration reporting requirement for settleable solids.

5. The year-round monthly average (geometric mean) and daily maximum water quality based concentration limits of 15 colonies/100 ml and 50 colonies/100 ml for fecal coliform bacteria.

6. The daily maximum water quality based concentration limit of 0.18 mg/L for total residual chlorine.

7. The technology based pH range limitation of 6.0 -9.0 standard units but reducing the monitoring frequency from 1/Day to 1/Week.

This permitting action is different than the previous permitting action in that it is;

8. Eliminating the monthly average concentration reporting requirement for settleable solids and reducing the monitoring frequency to 1/Week.

9. Eliminating the requirement to report influent BOD and TSS on data on the monthly Discharge Monitoring Repot (DMR). Influent values for both parameters shall continue to be reported on the monthly “49-Form” submitted to the Department.

10. Establishing technology based monthly average concentration limits for BOD and TSS.

11. Establishing whole effluent toxicity (WET) testing and chemical specific testing requirement pursuant to a revised Department rule, Chapter 530, Surface Water Toxics Control Program, promulgated on October 12, 2005.

c. History: The most recent permitting/licensing actions include the following:

March 24, 1982 - The Department issued Waste Discharge License #2598 authorizing the discharge of untreated municipal wastewaters to Passamaquoddy Bay, until a new wastewater treatment plant was completed.

December 28, 1982 - The City of Eastport submitted final applications to the EPA for a variance from secondary treatment requirements (primary treatment only) for the discharges pursuant to Section 301(h) of the Clean Water Act (CWA).

May 9, 1985 – The EPA signed a 301(h) decision to allow the City of Eastport to discharge primary treated wastewater to Passamaquoddy Bay.

December 31, 1985 - The EPA issued NPDES permit #ME0100200 for the City discharge. At the time of permit issuance, the existing sewer system for the City consisted of a combined system that discharged untreated wastewaters directly to the Passamaquoddy Bay via twenty (20) outfalls.

April 6, 1987 - The Department issued waste discharge license renewal #W002598-45-A-R with limitations and monitoring requirements similar to other NPDES permits and State licenses issued at that time for facilities with a variance from secondary treatment requirements.

August 9, 1988 - The Department issued a certification, pursuant to section 401 of the CWA, of the public notice draft NPDES permit modification #ME0100200. The modification included an increased flow from the City outfall from 0.34 MGD to 0.82 MGD and the addition of combined sewer overflow points #027 through #030.

August 26, 1988 - The EPA issued NPDES permit modification #ME0100200 for a five-year term.

May, 1992 - The primary treatment facilities became operational.

November 1, 1995 – The Department issued WDL #W002598-46-B-R for a five-year term.

March 26, 1999 – The Department administratively modified WDL #W002598-46-B-R to require year round disinfection due to the potential adverse impacts to an adjacent shellfish harvesting area by the wastewater discharges.

January 12, 2001 – The Department received authorization from the Environmental Protection Agency (EPA) to administer the NPDES program in Maine. Because the permit was being issued under a variance from secondary treatment requirements under the CWA, the modified 301(h) permit must be issued by EPA.

May 22, 2002 – The Department issued a Section 401 Water Quality Certification (#W002598-5L-D-R) to EPA indicating that the proposed primary treatment discharge from the Town's main plant would not cause or contribute to failure of the water body to attain the standards of its assigned classification.

August 13, 2002 – The Department and EPA issued a combined WDL and NPDES permit (#W002598-5L-C-R and ME0100200) authorizing the discharge of up to 0.82 MGD of primary treated wastewater from the permittee's facility for a five-year term. It is noted the permitting of the main plant and the Quoddy Village facility were separated at this point in time. The main plant maintained the original NPDES number of #ME0100200 and State WDL of #W002598 and the Quoddy Village facility was assigned a new NPDES number, #ME0102148 and WDL #W008131.

August 21, 2007 – The Town of Searsport submitted an application to the Department and EPA for renewal of the August 13, 2002 license/permit. The Department accepted the application for processing on September 4, 2007.

3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment (BPT), be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program,* require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants,* and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Maine law, 38 M.R.S.A., Section 469 classifies the receiving waters at the point of discharge as Class SC waters. Maine law, 38 M.R.S.A., Section 465-B(3) contains the classification standards for Class SC waters. Federal regulation 40 CFR, Part 125, Subpart G, more specifically Part 125.57(a)(2), states that discharge of pollutants in accordance with such modified requirements [301(h)] will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife, and allows recreational activities in and on the water.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2008 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, indicates that the Maine Department of Marine Resources (DMR) shellfish Area #59, Eastport, is closed to the harvesting of shellfish. See Attachment C of this Fact Sheet for the delineation of Area #59. The DMR has traditionally closed shellfish harvesting areas in the vicinity of outfall pipes when lack of field data on bacteria counts in the immediate area is insufficient, inconclusive or exceeds standards set in the National Shellfish Sanitation Program of the U.S. Department of Health and Human Services. DMR issued the closure notice on February 6, 2007 based on ambient water quality sampling indicated elevated levels of bacteria. Compliance with the monthly average and daily maximum limitations for fecal coliform bacteria will ensure the Eastport facility will not cause or contribute to the closurse of the shellfish harvesting area.

In the summer of 1995, the DEP and the EPA conducted a portion of the Biological Monitoring requirements (TVS sampling) and Water Quality Monitoring contained in the previous State waste discharge license and federal NPDES permit at certain 301(h) facilities. The DEP and EPA agreed that the SCUBA inspection was too dangerous as a result of the swift current in the receiving waters. The Department has made the determination that, based on the sampling to date and past effluent monitoring data, the discharge complies with 40 CFR, §125.57(a)(2). According to a document entitled "301(h) Facilities in Maine, Report of 1995 Monitoring Activities," prepared by the Department, dated July 1996 and submitted to EPA, "Water quality, sediment, and photographic information indicates that these [301(h)-type] discharges are not causing any significant impact to the receiving waters". That document concluded that no further ambient monitoring be conducted, and recommended that effluent monitoring be continued. By letter dated February 17, 1995 from EPA Regional Administrator, the EPA found there would be little risk of adverse impacts to the receiving waters from these discharges provided that the permittee perform effluent monitoring as part of the regular permit conditions.

All estuarine and marine waters in Maine are listed in a table entitled, *Category 4-B-3: Estuarine and Marine Waters Impaired by Atmospheric Deposition of Mercury* of the aforementioned 305(b) report. Text in this category states that all waters in the category are partially supporting fishing (fish and shellfish consumption) due to elevated levels of mercury, PCBs and dioxin in tissues of some fish and lobster tomally. The Department is not aware of any information that the Town of Eastport wastewater treatment facility is discharging PCBs or dioxin that may be causing or contributing to the partial non-attainment. As for mercury, Department rule Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, establishes controls on the discharge of mercury to the surface waters of the State through interim effluent limits and implementation of pollution prevention plans.

6. WAIVER OF SECONDARY TREATMENT REQUIREMENTS

Under Section 301(b)(1)(B) of the Clean Water Act (CWA), publicly owned treatment works (POTWs) in existence on July 1, 1977 were required to meet effluent limitations based on secondary treatment, which is defined in terms of the parameters BOD, TSS and pH. National effluent limitations for these pollutants were promulgated and included in POTW permits issued under Section 402 of the CWA.

Congress subsequently amended the CWA, adding Section 301(h), which authorizes the EPA Administrator, with State concurrence, to issue NPDES permits which modify the secondary treatment requirements with respect to the discharge of pollutants from a POTW into marine waters, provided that the applicant meet several conditions.

EPA issued a 301(h) waiver to the City of Eastport on May 9, 1985 based upon the following findings:

- That the discharge will comply with the State of Maine water quality standards for dissolved oxygen and suspended solids.
- That the proposed discharge will not adversely impact public water supplies or interfere with the protection and propagation of a balanced indigenous population of marine life and will allow for recreational activities.
- That no industrial wastes are discharged into the collection system.
- That the discharge will not result in an additional treatment requirements on other point and non-point sources.
- That the State of Maine concurs with the approval of the 301(h) waiver.

Federal regulation 40 CFR, Part 125, Subpart G, more specifically Part 125.57(a)(3), states that the applicant must establish a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable, and the scope of such monitoring is limited to include only those scientific investigations which are necessary to study the effects of the proposed discharge. EPA has made a BPJ determination that the scope of effluent limitations and monitoring requirements in Special Condition A(1) of this permit are sufficient to provide the necessary information to study the effects of the discharge on the receiving waters.

Because all of the prior 301(h) conditions have been maintained and because there has been no new or substantially increased discharge from the permitee’s facility, EPA proposes, through the reissuance of the City of Eastport’s permit, to carry forward the original 301(h) waiver decision.

7. ENDANGERED SPECIES ACT

Purpose: Section 7(a)(2) of the Endangered Species Act (ESA) requires federal agencies to ensure, in consultation with the Services, that actions an agency authorizes, funds or carries out are not likely to jeopardize the continued existence of federally listed endangered and threatened species, or result in the destruction or adverse modification of listed species' designated critical habitat. EPA believes that Section 7(a)(2) of the Endangered Species Act applies when EPA carries out actions approving State or Tribal water quality standards and NPDES permitting programs under the CWA.

ESA Designation: On November 17, 2000, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (NMFS) listed wild Atlantic Salmon in eight Maine rivers as endangered. Those eight rivers are the Dennys, East Machias, Machias, Pleasant, Narraguagus, Ducktrap, and Sheepscot Rives and Cove Brook. Renewal of Eastport's NPDES permit would allow the continuation of the discharge of primary treated wastewaters to the coastal waters of Passamaquoddy Bay.

ESA Determination: Because of the low flow volume of the discharge and because the wastewaters are not known to contain pollutants at concentrations which could be toxic to aquatic life, and because the discharge is not released directly to a Maine DPS Atlantic Salmon River, EPA has determined that the action of renewal of the existing NPDES permit for the discharge of treated domestic wastewater is not likely to adversely affect listed species or their critical habitat under NMFS jurisdiction.

8. EFH (ESSENTIAL FISH HABITAT) DETERMINATION

Under the 1996 Amendments (PL 104-267) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Services (NMFS) if EPA's action or proposed actions that it funds, permits, or undertakes, "may adversely impact any essential fish habitat." 16 U.S.C. § 1855(b). The Amendments broadly define "essential fish habitat" as: "waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. 16 U.S.C. § 1802 (10). Adversely impact means any impact which reduces the quality and/or quantity of EFH. 50 C.F.R. § 600.910 (a). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. Essential fish habitat is only designated for species for which federal fisheries management plans exist. 16 U.S.C. § 1855(b) (1) (A). EFH designations for New England were approved by the U.S. Department of Commerce on March 3, 1999.
National Marine Fisheries Service designation of Essential Fish Habitat for the 10 minute square that includes the Eastport (Main plant) discharge (N44 ^{o} 54.092', W66 ^{o} 59.018')

10’ x 10’ Square Coordinates:

Boundary Coordinate	North	East	South	West
	44° 30.0’ N	68° 50.0’ W	44° 20.0’ N	69° 00.0’ W

Square Description (i.e. habitat, landmarks, coastline markers): Waters within the square within Passamaquoddy Bay from Lubec, ME., to Eastport, ME., including Woodward Point, the southeast corner of Moose Island, Treat Island, Estes Head, Dudley Island, Burial Island, and the Friar Roads. These waters extend strictly to the Hague Line (EEZ boundary) within this square.

Species and Life Stage Designation

Species	Eggs	Larvae	Juveniles	Adults
Atlantic Salmon (*Salmo salar)*			X	X
Atlantic cod *(Gadus morhua)*		X	X	S
haddock *(Melanogrammus aeglefinus)*				
pollock *(Pollachius virens)*		X	X	X
whiting *(Merluccius bilinearis)*			X	X
offshore hake *(Merluccius albidus)*				
red hake *(Urophycis chuss)*			X	X
white hake *(Urophycis tenuis)*			X	X
redfish *(Sebastes fasciatus)*	n/a			
witch flounder *(Glyptocephalus cynoglossus)*				
winter flounder *(Pleuronectes americanus)*	X	X	X	X
yellowtail flounder *(Pleuronectes ferruginea)*	X	X		
windowpane flounder *(Scopthalmus aquosus)*	X	X	X	X
American plaice *(Hippoglossoides platessoides)*	X	X	X	X
ocean pout *(Macrozoarces americanus)*	X	X	X	X
Atlantic halibut *(Hippoglossus hippoglossus)*	X	X	X	X
Atlantic sea scallop *(Placopecten magellanicus)*	X	X	X	X
Atlantic sea herring *(Clupea harengus)*		X	X	X
monkfish *(Lophius americanus)*				
bluefish *(Pomatomus saltatrix)*				
long finned squid *(Loligo pealei)*	n/a	n/a		
short finned squid *(Illex illecebrosus)*	n/a	n/a		

Atlantic butterfish *(Peprillus triacanthus)*				
Atlantic mackerel *(Scomber scombrus)*			X	X
summer flounder *(Paralicthys dentatus)*				
scup *(Stenotomus chrysops)*	n/a	n/a		
black sea bass *(Centropristus striata)*	n/a			
surf clam *(Spisula solidissima)*	n/a	n/a		
ocean quahog *(Artica islandica)*	n/a	n/a		
spiny dogfish *(Squalus acanthias)*	n/a	n/a		
tilefish *(Lopholatilus chamaeleonticeps)*				
bluefin tuna *(Thunnus thynnus)*				

Due to the low volume of the discharge and the lack of toxic potential of the wastewater discharged, EPA believes that renewal of the Eastport permit is unlikely to adversely impact the above-designated Essential Fish Habitat. EPA has, therefore, not requested an EFH consultation with the National Marine Fisheries Service in regard to the renewal of this permit.

9. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

a. Flow – The previous permit contained a monthly average flow limitation of 0.82 million gallons per day (MGD). The limitation is being carried forward in this permitting action but is being expressed as 820,000 gallons per day (gpd) rather than MGD. The limit was proposed by the permittee in 1982 when it submitted the application to the EPA for a variance from secondary treatment requirements. Federal regulations found at 40 CFR §122.45(b)(i) require that effluent limitations be calculated based on deign flow which is found in the Permit Application. A review of the DMR data for the period April 2005 - March 2007 inclusively, indicates the monthly average flow discharged has ranged from 0.075 MGD (75,000 gpd) to 0.236 MGD (236,000 gpd) with an arithmetic mean of 0.118 MGD (118,000 gpd).

b. Dilution Factors: Department Regulation Chapter 530 *Surface Water Toxics Control Program*, §4(a)(2) states:

> (1) *For estuaries where tidal flow is dominant and marine discharges, dilution factors are calculated as follows. These methods may be supplemented with additional information such as current studies or dye studies.*

(a) For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.

(b) For discharges to estuaries, dilution must be calculated using a method such as MERGE, CORMIX or another predictive model determined by the Department to be appropriate for the site conditions.

(c) In the case of discharges to estuaries where tidal flow is dominant and marine waters, the human health criteria must be analyzed using a dilution equal to three times the chronic dilution factor.

Using plan and profile information of the outfall and the CORMIX model, the Department has determined the dilution factors for the discharge of 0.82 MGD from the wastewater treatment facility are as follows:

Acute = 14:1 Chronic = 341:1 Harmonic mean = 1,023:1[(1)]

(1) Pursuant to Department rule Chapter 530, "*Surface Water Toxics Control Program*", §4(2)(c), the harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by a factor of three (3).

b. Biochemical oxygen demand (BOD) and total suspended solids (TSS) - Federal regulations state that primary or equivalent treatment means treatment by screening, sedimentation, and skimming adequate to remove at least thirty percent (30%) of the BOD and 30% of the TSS material in the treatment works influent. The Department and EPA consider a thirty percent (30%) removal of BOD and a fifty percent (50%) removal of TSS from the influent loading as a best professional judgment (BPJ) determination of best practicable treatment (BPT) for primary facilities. These percent removal requirements were established in the previous permitting action and are being carried forward in this permitting action as the percent removal is the foundation for the permitting of 301(h) facilities.

The previous permit established monthly average technology based mass and concentration limits for BOD and TSS with a monitoring frequency of 1/Week. The limitations were calculated based on an assumed influent concentration of 290 mg/L for each parameter and a 30% removal for BOD and a 50% removal for TSS. This assumed value is based on the EPA Design Manual, Onsite Wastewater Treatment and Disposal Systems, dated October 1980, table 4-3 entitled "Characteristics of Typical Residential Wastewater" high range of values for BOD5 and TSS. Derivation of the limits is as follows:

BOD: 290 mg/L – [(290 mg/L)(0.30)] = 203 mg/L
(203 mg/L)(8.34)(0.82 MGD) = 1,388 lbs/day

A review of the DMR data for the period April 2005 – March 2007 inclusively, indicates the monthly average effluent concentration of BOD discharged has ranged from 88 mg/L to 332 mg/L with an arithmetic mean of 227 mg/L. As for the monthly average mass of BOD discharged, the DMR data indicates the range has been from 108 lbs/day to 632 lbs/day with an arithmetic mean of 224 lbs/day. Monthly percent removal rates for BOD for this time period range from 30% - 68% with an arithmetic mean of 49%.

TSS: 290 mg/L – [(290 mg/L)(0.50)] = 145 mg/L
(145 mg/L)(8.34)(0.82 MGD) = 992 lbs/day

A review of the DMR data for the period calendar years April 2005 – March 2007 inclusively, indicates the monthly average effluent concentration of TSS discharged has ranged from 6 mg/L to 34 mg/L with an arithmetic mean of 19 mg/L. As for the monthly average mass of TSS discharged, the DMR data indicates the range has been from 5 lbs/day to 49 lbs/day with an arithmetic mean of 20 lbs/day. Monthly percent removal rates for TSS for this time period range from 87% - 97% with an arithmetic mean of 93%.

The technology based mass and concentration limitations and monitoring requirements for BOD & TSS are being carried forward in this permitting action and are based on a BPJ determination by the Department and EPA given the size and type of treatment.

c. Settleable solids – The previous permitting action established monthly average and daily maximum concentration reporting requirements for settleable solids with a 1/Day monitoring frequency. A review of the DMR data for the period April 2005 – March 2007 indicates the monthly average and daily maximum concentrations have been reported as <0.1 ml/L for all 24 months. Based on the historic data results, the Department and EPA are making a BPJ determination to reduce the monitoring frequency to 1/Week to be consistent with the monitoring frequencies for BOD and TSS.

d. Fecal coliform bacteria – The previous permitting action established monthly average (geometric mean) and daily maximum limits of 15 colonies/100 ml and 50 colonies/100 ml respectively, that are consistent with limitations in the National Shellfish Sanitation Program. The Fact Sheet of the previous permitting action indicated the limitations were in effect on a year-round basis at the request of the Maine Department of Marine Resources (DMR). The numeric limitations are being carried forward in this permitting action along with a monitoring frequency of 1/Week.

A review of the DMR data for the period calendar years April 2005 – March 2007 inclusively indicates the monthly average (geometric mean) fecal coliform bacteria levels discharged have ranged from 1.4 – 5.6 colonies/100 mL with an arithmetic mean of 4 colonies/100 mL and the daily maximum levels have ranged from <4 – 9 colonies/100 mL with an arithmetic mean of 6 colonies/100 mL.

e. Total residual chlorine(TRC) – The previous permitting action established a water quality based daily maximum limitation of 0.18 mg/L with monitoring frequency of 1/Day. Limits on total residual chlorine are specified to ensure attainment of the in-stream water quality criteria for chlorine and that BPT technology is utilized to abate the discharge of chlorine. Permits issued by this Department impose the more stringent of the calculated water quality based or BPT based limits. The Department has established a daily maximum best practicable treatment (BPT) limitation of 1.0 mg/L for facilities that disinfect their effluent with elemental chlorine or chlorine based compounds unless the calculated acute water quality based threshold is lower than 1.0 mg/L. For facilities that need to de-chlorinate the discharge to meet water quality based thresholds, the Department has established daily maximum and monthly average best practicable treatment limits of 0.3 mg/L and 0.1 mg/L respectively

Water quality based thresholds for TRC can be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	0.013 mg/L	0.0075 mg/L	14:1	341:1	0.18 mg/L	2.6 mg/L

Example calculation: Acute – 0.013 mg/L (14) = 0.18 mg/L

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

Being that the acute water quality based daily maximum threshold calculated above is more stringent than the Department's BPT limit of 0.3 mg/L, the water quality based limit of 0.18 mg/L is being carried forward in this permitting action along with the monitoring frequency of 1/Day.

A review of the DMR data for the period April 2005 – March 2007 indicates the daily maximum TRC discharged has ranged from 0.01 mg/L to 0.02 mg/L with an arithmetic mean of 0.01 mg/L.

g. pH – The previous permitting action establishing a BPT pH range limit of 6.0 –9.0 standard units pursuant to Department rule, Chapter 525(3)(III)(c), along with a monitoring frequency of 1/Day. A review of the DMR data for the period April 2005 –March 2007 indicates the pH range limitation has never been exceeded. Therefore, this permitting action is reducing the monitoring frequency 1/Week based on the historical data and compliance record.

h. Whole Effluent Toxicity (WET) & Chemical-Specific Testing: Maine law, 38 M.R.S.A., Sections 414-A and 420, prohibit the discharge of effluents containing substances in amounts that would cause the surface waters of the State to contain toxic substances above levels set forth in Federal Water Quality Criteria as established by the USEPA. Department Rules, 06-096 CMR Chapter 530, *Surface Water Toxics Control Program*, and Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants* set forth ambient water quality criteria (AWQC) for toxic pollutants and procedures necessary to control levels of toxic pollutants in surface waters.

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

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

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

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

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

Screening level testing

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

Surveillance level testing

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

The Department's files do not contain any WET, analytical chemistry or priority pollutant testing for the City of Eastport. Therefore, this permit establishes surveillance level and screening level testing as described above.

10. DISCHARGE IMPACT ON RECEIVING WATERS

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

11. PUBLIC COMMENTS

Notice of the application being filed with the Department and EPA for renewal of the permit was placed in the Quoddy Times newspaper on or about August 1, 2007. Notice of the draft permit will be placed in a regional Maine newspaper for a minimum 30-day comment period during which time, written comments may be directed to both the Department and EPA at the addresses given on page 16 of this Fact Sheet. Upon review of the public comments and receipt of Maine DEP Water Quality Certification, EPA will make a final decision whether to issue this permit.

12. CONTACTS

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

Gregg Wood
Division of Water Quality Management
Bureau of Land & Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017
Phone: 207-287-7693
Email: gregg.wood@maine.gov

Doug Corb
US EPA Region I
One Congress Street Suite 1100-CMP
Boston, MA 02114
Phone: 617-918-1565
Email: corb.doug@epa.gov

13. RESPONSE TO COMMENTS:

Reserved until the close of the 30-day comment period.

In Re:

CITY OF EASTPORT (MAIN PLANT)	)	
EASTPORT, WASHINGTON COUNTY, MAINE	)	TENTATIVE DECISION
PUBLICLY OWNED TREATMENT WORKS,	)	OF THE REGIONAL
APPLICATION FOR SECTION 301(h)	)	ADMINISTRATOR PURSUANT TO
VARIANCE FROM THE SECONDARY	)	40 CFR PART 125, SUBPART G
TREATMENT REQUIREMENTS OF THE	)	
CLEAN WATER ACT	)	
	)	

The City of Eastport's Main treatment facility (Eastport hereinafter), is a publicly owned treatment works located in the City of Eastport, Maine. Eastport has submitted a waiver application pursuant to Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987 (the Act). The U.S. Environmental Protection Agency (EPA hereinafter) has reviewed the merits of this application for the waiver request. Based on this review, it is my tentative decision that Eastport should receive a 301(h) waiver from secondary treatment standards in accordance with the terms, conditions, and limitations proposed in the modified 301(h) National Pollutant Discharge Elimination System (NPDES) permit.

Eastport's application is seeking approval for the discharge of up to a monthly average of 820,000 gallons per day of primary treated waste water generated by commercial and residential entities. Eastport is seeking renewal of its variance from the secondary treatment requirements of the Clean Water Act, as amended by the Act pursuant to Section 301(h) that was originally granted by the EPA on May 9, 1985 and subsequently renewed on August 13, 2002. The Eastport's application is based on an improved discharge as defined at 40 CFR § 125.58. It is my tentative decision that the City of Eastport be granted a renewal of the variance in accordance with the terms, conditions, and limitations of the attached evaluation. This determination is subject to concurrence by the State of Maine as required by Section 301(h) of the Act. Region I has prepared a draft NPDES permit in accordance with this decision.

Because my decision is based on available evidence specific to this particular discharge, it is not intended to assess the need for secondary treatment by other publicly owned treatment works discharging to the marine environment. This decision and the NPDES permit implementing this decision are subject to revision on the basis of subsequently acquired information relating to the impacts of the less-than-secondary discharge on the marine environment.

Pursuant to the procedures of the NPDES Permit Regulations, 40 CFR Part 124, a public notice will be issued which describes the comment procedures that are available to interested persons in regard to this decision and its accompanying draft NPDES permit.

Date:

Robert W. Varney
Regional Administrator
Environmental Protection Agency
Region I

TENTATIVE DECISION DOCUMENT

ANALYSIS OF THE APPLICATION FOR A SECTION 301(h)

SECONDARY TREATMENT VARIANCE

FOR

THE CITY OF EASTPORT'S

WASTE WATER TREATMENT PLANT

MAIN PLANT

ENVIRONMENTAL PROTECTION AGENCY
REGION I - NEW ENGLAND

August 2008

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SUMMARY

The applicant, the City of Eastport (Eastport hereinafter) is seeking a variance from secondary treatment requirements for the discharge of up to 820,000 gallon per day (gpd) of sanitary waste water. The treatment plant facility is located in the Town of Eastport, Maine and discharges its effluent to Passamaquoddy Bay, a Class SC waterway according to 38 Maine Revised Statutes Annotated (M.R.S.A.) §469. See Attachment A of the Fact Sheet of the permit for a location map.

The EPA followed the guidance provided in EPA's Amended Section 301(h) Technical Support Document (1994) for evaluating the improved discharge for a small applicant (average dry weather flows below 5.0 MGD). The Region relied on information in a document entitled "301(h) Facilities in Maine, Report of 1995 Monitoring Activities," prepared by the State of Maine's Department of Environmental Protection (MEDEP) and submitted to EPA in July 1996 as well as monthly compliance date generated by Eastport for the period March 2002 through December 2007 as required by the terms and conditions of the most current NPDES permit.

The applicant's receipt of a Section 301(h) variance from secondary treatment is contingent upon the following conditions:

1. The treatment system's ability to maintain an average monthly 30 percent (%) removal rate of five-day biochemical oxygen demanding (BOD_5) material and 50% removal for total suspended solids (TSS) (State of Maine Section 401 Water Quality Certification Condition), and;

2. The discharge's ability to meet all water quality standards at the edge of the zone of initial dilution with the discharge from the improved outfall, and;

3. State Certification under 401 of the Act regarding compliance with State law and State Water Quality Standards, including a basis for the conclusion reached.

I. INTRODUCTION

The City of Eastport (Eastport hereinafter) has requested a renewal of its five-year variance from the secondary treatment requirements for its publicly owned treatment works (POTW) pursuant to Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987. This tentative decision document summarizes the findings, conclusions and recommendations of the New England Region of the Environmental Protection Agency (EPA) with regard to Eastport's 301(h) waiver request. The conclusions and recommendations in this document are based on the application of the requirements set forth in 40 CFR Part 125, Subpart G (revised on August 9, 1994) to Eastport's discharge.

The applicant's most recent Section 301(h) modified National Pollutant Discharge Elimination System (NPDES) permit expired on August 13, 2007. Eastport submitted an application for a renewal of its Section 301(h) variance on August 21, 2007. The EPA applied the criteria established in 40 CFR Part 125, Subpart G, "Criteria for Modifying the Secondary Treatment Requirements Under Section 301(h) of the Clean Water Act," in acting on this request.

II. DESCRIPTION OF TREATMENT FACILITY

The Eastport Main facility provides a primary level of treatment by (1) screening and grit removal, (2) two primary treatment Imhoff tanks (3) prechlorination (if needed), (4) chlorination and dechlorination, (5) effluent flow metering, (6) sampling of effluent quality, (7) sludge removal, mixing, drying and stabilization (8) lime, polymer and potassium permanganate chemical addition facilities, and a Control Building. The treated effluent is discharged to Passamaquoddy Bay by way of a twenty four (24) inch diameter pipe that is submerged at mean low water.

Waste water enters the treatment plant through a 10-inch diameter force main to an influent channel to the screening and grit removal facilities. Following screening and grit removal the waste water is conveyed by gravity to a weir controlled flow splitting structure which controls flow into the two Imhoff treatment tanks. The sludge and scum are stored in the lower compartment of the tank for anaerobic digestion and then seasonally disposed of by liquid sludge land application or dewatered in the on-site drying beds and either land filled or sent to another appropriate facility for further treatment and disposal. The waste water flows from the Imhoff tanks to the chlorine contact tank for disinfection. The waste water is disinfected by the addition of chlorine in a mixing chamber at the head end of the contact tank. The waste water is dechlorinated at the tail end of the chlorine contact tank in another mixing chamber. Effluent flow is monitored and sampled prior to discharge to Passamaquoddy Bay via the ocean outfall. See Attachment B of the Fact Sheet of the permit for a schematic of the waste water treatment processes.

III. DESCRIPTION OF RECEIVING WATER

Passamaquoddy Bay is a marine water subject to tidal action with a differences in tides (mean high to mean low) of up to 20 feet with very strong currents. Maine law, 38 M.R.S.A., §469 classifies the receiving waters at the point of discharge as Class SC waters. Maine law, 38 M.R.S.A., Section 465-B(2) contains the classification standards for Class SB waters. See Section V(B) of this document for a description of the designated uses as well as numeric and narrative water quality standards for Class SC waters.

The Eastport waste water treatment facility discharges to a shellfish harvesting area that the Maine Department of Marine Resources (DMR) has designated as shellfish Area #59(B), Eastport. See Attachment C of the Fact Sheet of the permit for a map depicting Area #59(B).

IV. PHYSICAL CHARACTERISTICS OF THE DISCHARGE

A. Dilution Factors

Pursuant to 40 CFR 125.62(a), the outfall and diffuser must be located and designed to provide adequate initial dilution, dispersion, and transport of waste water to meet all applicable water quality standards at and beyond the boundary of the zone of initial dilution (ZID) during periods of maximum stratification and during other periods when more critical situations may exist.

The effluent from the Eastport waste water treatment facility is conveyed to Passamaquoddy Bay via a polyvinylchloride (PVC) outfall pipe measuring twenty-four (24) inches in diameter. At the time of the previous permitting action the outfall pipe extended out into the receiving water approximately 500 feet with approximately twenty (20) feet of water over the crown of the pipe at high tide and nine (9) feet at mean low water. MEDEP rule, 06-096 CMR Chapter 530.5 *Surface Water Toxics Control Program,* §4(a)(2) states:

(1) *For estuaries where tidal flow is dominant and marine discharges, dilution factors are calculated as follows. These methods may be supplemented with additional information such as current studies or dye studies.*

(a) For discharges to the ocean, dilution must be calculated as near-field or initial dilution, or that dilution available as the effluent plume rises from the point of discharge to its trapping level, at mean low water level and slack tide for the acute exposure analysis, and at mean tide for the chronic exposure analysis using appropriate models determined by the Department such as MERGE, CORMIX or another predictive model.

(b) For discharges to estuaries, dilution must be calculated using a method such as MERGE, CORMIX or another predictive model determined by the Department to be appropriate for the site conditions.

IV. PHYSICAL CHARACTERISTICS OF THE DISCHARGE (cont'd)

(c) In the case of discharges to estuaries where tidal flow is dominant and marine waters, the human health criteria must be analyzed using a dilution equal to three times the chronic dilution factor.

Based on plan and profile information submitted to the Department, the Department determined through CORMIX modeling, the dilution factors associated with the facility at the permitted flow of 820,000 gpd were as follows.

Acute = 14:1 Chronic = 341:1 Harmonic mean = 1,023 **(1)**

(1) Pursuant to Department rule 06-096 CMR Chapter 530, §4(2)(c), the harmonic mean dilution factor is approximated by multiplying the chronic dilution factor by a factor of three (3).

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA

A. Primary or equivalent treatment requirements [40 CFR 125.60]

Federal regulation 40 CFR 125.60 specifies that the applicant shall demonstrate that its effluent has received at least primary or equivalent treatment. Primary or equivalent treatment is defined as: "treatment by screening, sedimentation, and skimming adequate to remove 30 percent of the biochemical oxygen demanding (BOD) material and 30 percent of the total suspended solids (TSS) in the treatment works influent, and disinfection, where appropriate." (See definition at 40 CFR 125.58(r)). It is noted the MEDEP considers 50% removal of the TSS as best practicable treatment (BPT).

The previous NPDES permit established monthly average technology based mass and concentration limits for BOD and TSS with a monitoring frequency of 1/Week. The limitations were calculated based on an assumed influent concentration of 290 mg/L for each parameter and a 30% removal for BOD and a 50% removal for TSS. This assumed value is based on the EPA Design Manual, Onsite Wastewater Treatment and Disposal Systems, dated October 1980, table 4-3 entitled "Characteristics of Typical Residential Wastewater" high range of values for BOD5 and TSS. Derivation of the limits is as follows:

BOD: 290 mg/L – [(290 mg/L)(0.30)] = 203 mg/L
(203 mg/L)(8.34)(0.820 MGD) = 1,388 lbs/day

A review of the DMR data for the period April 2005 – March 2007 inclusively, indicates the monthly average concentration of BOD discharged has ranged from 88 mg/L to 332 mg/L with an arithmetic mean of 227 mg/L. As for the monthly average mass of BOD discharged, the DMR data indicates the range has been from 108 lbs/day to 632 lbs/day with an arithmetic mean of 224 lbs/day. Monthly average removal rates for BOD for said period range from 30% - 68% with an arithmetic mean of 49%.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

TSS: 290 mg/L – [(290 mg/L)(0.50)] = 145 mg/L
(145 mg/L)(8.34)(0.820 MGD) = 992 lbs/day

A review of the DMR data for the period April 2005 – March 2007 inclusively, indicates the monthly average concentration of TSS discharged has ranged from 6 mg/L to 34 mg/L with an arithmetic mean of 19 mg/L. As for the monthly average mass of TSS discharged, the DMR data indicates the range has been from 5 lbs/day to 49 lbs/day with an arithmetic mean of 20 lbs/day. Monthly average removal rates for TSS for said period range from 87% - 97% with an arithmetic mean of 93%.

Since issuance of the previous NPDES permit (August 2002) there has never been any excursion of the technology based mass limitations for BOD & TSS.
Therefore, the facility currently meets the requirements of 40 CFR Part 125.60.

B. Existence of and Compliance with Applicable Water Quality Standards [40 CFR 125.61]

40 CFR 125.61(a) specifies that there must be a water quality standard applicable to each pollutant for which a modification is requested. The applicant must: (1) demonstrate that the modified discharge will comply with such water quality standards (40 CFR 125.61(b)(1)), and; (2) provide a determination, signed by the "certifying authority" (i.e., the MEDEP), that the proposed modified discharge will comply with applicable provisions of State law, including water quality standards (40 CFR 125.61(b)(2)).

The State of Maine has adopted water quality standards including water use classifications. At the point of discharge, Passamaquoddy Bay is classified as Class SC pursuant to Maine law, 38 M.R.S.A., §469. Maine law 39 M.R.S.A §465-B(3) contains the standards for Class SB waters as follows:

Class SC waters must be of such quality that they are suitable for recreation in and on the water, fishing, aquaculture, propagation and restricted harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation and as a habitat for fish and other estuarine and marine life.

The dissolved oxygen content of Class SC waters must be not less than 70% of saturation. Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 14 per 100 milliliters or an instantaneous level of 94 per 100 milliliters. In determining human and domestic animal origin, the department shall assess licensed and unlicensed sources using available diagnostic procedures. The

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in restricted shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program, United States Food and Drug Administration

Discharges to Class SC waters may cause some changes to estuarine and marine life provided that the receiving waters are of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community

Federal regulation 40 CFR, Part 125, Subpart G, more specifically Part 125.57(a)(2), states that discharge of pollutants in accordance with such modified requirements [301(h)] will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife, and allows recreational activities in and on the water.

Maine law 38 M.R.S.A., Section 420 and Department rule 06-096 CMR Chapter 530, *Surface Water Toxics Control Program,* require the regulation of toxic substances not to exceed levels set forth in Department rule 06-096 CMR Chapter 584, *Surface Water Quality Criteria for Toxic Pollutants,* and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

The water quality standards applicable to the pollutants for which a 301(h) modified permit is requested are discussed below. Additional relevant water quality standards are discussed in Section V(C) of this document.

(1) Dissolved Oxygen (DO) [40 CFR Section 125.61(a)(1)]

Maine law, 38 MRSA, §465-B(3)(B) specifies that Class SC waters shall have a dissolved oxygen content of at least 70% of saturation.

There is limited data in the vicinity of the discharge for average daily DO concentrations. EPA believes however, that average daily concentrations would likely be greater than the 70% saturation standard found in Maine law. This belief is based on the fact that in the summer of 1995, the MEDEP and the EPA conducted a portion of the Biological Monitoring requirements (TVS sampling) and Water Quality Monitoring contained in the 1985 State waste discharge license and federal NPDES permit at certain 301(h) facilities. The MEDEP and EPA agreed that the SCUBA inspection was too dangerous as a result of the swift current in the receiving waters. The Department has made the determination that,

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

based on the sampling to date and past effluent monitoring data, the discharge complies with 40 CFR, §125.57(a)(2). According to a document entitled "301(h) Facilities in Maine, Report of 1995 Monitoring Activities," prepared by the Department, dated July 1996 and submitted to EPA, "Water quality, sediment, and photographic information indicates that these [301(h)-type] discharges are not causing any significant impact to the receiving waters". That document concluded that no further ambient monitoring be conducted, and recommended that effluent monitoring be continued. By letter dated February 17, 1995 from the EPA Regional Administrator, the EPA found there would be little risk of adverse impacts to the receiving waters from these discharges provided that the permittee perform effluent monitoring as part of the regular permit conditions. The proposed NPDES permitting action associated with this decision requires said effluent monitoring. The EPA has determined that the DO levels in the vicinity of the improved discharge will likely meet the State water-quality standards.

(2) Fecal coliform bacteria [40 CFR Section 125.61(a)(3)]

Maine law 38 M.R.S.A. §465-B(3)(B) specifies that the numbers of total coliform bacteria or other specified indicator organisms in samples representative of the waters in shellfish harvesting areas may not exceed the criteria recommended under the National Shellfish Sanitation Program.

The previous permitting action established monthly average (geometric mean) and daily maximum limits for fecal coliform bacteria of 15 colonies/100 ml and 50 colonies/100 ml respectively, that are consistent with limitations in the National Shellfish Sanitation Program. The numeric limitations are being carried forward in this permitting action along with a monitoring frequency of 1/Week. To be consistent with the previous permitting action issued by the Department and EPA, this permitting action is establishing year-round disinfection to protect the health and welfare of the general public.

A review of the DMR data for the period April 2005 – March 2007 indicates the monthly average (geometric mean) fecal coliform bacteria levels discharged have ranged from 1.4 – 5.6 colonies/100 mL with an arithmetic mean of 4 colonies/100 mL and the daily maximum levels have ranged from <4 – 9 colonies/100 mL with an arithmetic mean of 6 colonies/100 mL. Since issuance of the previous NPDES permit (August 2002) there has never been any excursions of the water quality based concentration limitations for fecal coliform bacteria. Therefore, the facility currently meets the requirements of 40 CFR Part 125.60.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

(3) pH [40 CFR Section 125.61(a)(3)]

Maine law 38 M.R.S.A. §464(4)(A)(5) specifies that no discharge shall cause the pH of marine water to fall outside the range of 7.0 – 8.5 standard units. The previous NPDES permit established a BPT pH range limit of 6.0 –9.0 standard units pursuant to Department rule, 06-096 CMR Chapter 525(3)(III)(c), along with a monitoring frequency of 1/Day. A review of the DMR data for the period April 2005 – March 2007 indicates there has never been any excursions of the pH range limitation. Therefore, the facility currently meets the requirements of 40 CFR Part 125.60.

(4) Toxic pollutants [40 CFR Section 125.61(a)(3)]

Maine law 38 M.R.S.A. § 420 prohibits dischargers from discharging toxic pollutants in toxic amounts. MEDEP rule, 06-096 CMR Chapter 584 establishes numeric ambient water quality criteria for pollutants known to be toxic to aquatic life or harmful to humans. The only pollutant discharged from the Eastport facility that may be discharged in toxic amounts is chlorine as it used as a disinfectant of the final effluent from the facility.

The August 2002 NPDES permit established a water quality based daily maximum limitation of 0.18 mg/L for total residual chlorine with monitoring frequency of 1/Day. Limits on total residual chlorine are specified to ensure attainment of the in-stream water quality criteria for chlorine and that BPT technology is utilized to abate the discharge of chlorine. Permits issued by this Department impose the more stringent of the calculated water quality based or BPT based limits. 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 unless the calculated acute water quality based threshold is lower than 1.0 mg/L. For facilities that need to de-chlorinate the discharge to meet water quality based thresholds, the Department has established daily maximum and monthly average best practicable treatment limits of 0.3 mg/L and 0.1 mg/L respectively

Water quality based thresholds for TRC can be calculated as follows:

Parameter	Acute Criteria	Chronic Criteria	Acute Dilution	Chronic Dilution	Acute Limit	Chronic Limit
Chlorine	0.013 mg/L	0.0075 mg/L	14:1	341:1	0.18 mg/L	2.6 mg/L

Example calculation: Acute – 0.013 mg/L (14) = 0.18 mg/L

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

Being that the acute water quality based daily maximum threshold calculated above is more stringent than the Department's BPT limit of 0.3 mg/L, the water quality based limit of 0.18 mg/L is being carried forward in this permitting action along with the monitoring frequency of 1/Day.

A review of the DMR data for the period April 2005 – March 2007 indicates the daily maximum TRC discharged has ranged from 0.01 mg/L to 0.02 mg/L with an arithmetic mean of 0.01 mg/L and has never been exceeded during said period. Therefore, the facility currently meets the requirements of 40 CFR Part 125.60.

C. Attainment or maintenance of water quality which assures protection of public water supplies; assures the protection and propagation of a balanced indigenous population (BIP) of shellfish, fish and wildlife; and allows recreational activities [40 CFR 125.62]

(1) At the time the 301(h) modification becomes effective, the applicant's outfall and diffuser must be located and designed to provide adequate initial dilution, dispersion, and transport of wastewater such that the discharge does not exceed at or beyond the zone of initial dilution all applicable water quality standards [40 CFR 125.62(a)(1)(i)]

The State of Maine has applicable State water quality standards that directly correspond to the CWA Section 304(a)(1) water quality criterion. Modeling performed by the Department indicates the outfall will provide adequate dilution, dispersion, and transport of waste water such that the discharge will not exceed, at or beyond the zone of initial dilution, any applicable water-quality standards. See Section V(A)(1) of this document for the dilution factors calculated.

(2) Impact of the Discharge on Public Water Supplies [40 CFR 125.62(b)]

The Eastport discharge will not have an impact on public drinking water supplies as the facility discharges to a marine environment and the EPA and MEDEP are not aware of any proposals to construct a desalination plant in the vicinity of the Eastport discharge location.

(3) Biological Impact of Discharge. [40 CFR 125.62(c)]. The discharge must allow for the attainment or maintenance of water quality which assures protection and propagation of a balanced indigenous population (BIP) of fish, shellfish, and wildlife (40 CFR 125.62(c)(1)). A BIP must exist immediately beyond the boundary of the zone of initial dilution (ZID) and in all areas beyond the ZID that are actually or potentially affected by the applicant's discharge (40 CFR 125.62(c)(2)).

See the discussion in Section V(1) of this document.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

(4) Conditions within the zone of initial dilution must not contribute to extreme adverse biological impacts, including, but not limited to, the destruction of distinctive habitats of limited distribution, the presence of a disease epicenter, or the stimulation of phytoplankton blooms which have adverse effects beyond the zone if initial dilution. [40 CRF 125.62(c)(3)]

See the discussion in Section V(1) of this document.

(5) For modified discharges into saline estuarine water, the benthic population within the ZID must not differ substantially from the balanced indigenous populations which exist immediately beyond the boundary of the ZID; the discharge must not interfere with estuarine migratory pathways within the ZID; and the discharge must not result in the accumulation of toxic pollutants or pesticides at levels which exert adverse effects on the biota within the ZID. [40 CFR 125.62(c)(4)(i), (ii), and (iii)]

See the discussion in Section V(1) of this document.

(6) Impact of Discharge on Recreational Activities. The discharge must allow for the attainment or maintenance of water quality which allows for recreation activities beyond the zone of initial dilution, including, without limitation, swimming, diving, boating, fishing and picnicking, and sports activities along shorelines and beaches. [40 CFR 125.62(d)]

See the discussion in Section V(1) of this document.

(7) Additional requirements for applications based on improved or altered discharges [40 CFR 125.62(e)].

See the discussion in Section V(1) of this document.

(8) Stressed Waters [40 CFR 125.62(f)]

The State of Maine 2006 Integrated Water Quality Monitoring and Assessment Report, prepared by the Department pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, indicates that the Maine Department of Marine Resources (MEDMR) shellfish Area #59(B), Eastport, is closed to the harvesting of shellfish. See Attachment C of this document for the delineation of Area #59(B) The DMR has traditionally closed shellfish harvesting areas in the vicinity of outfall pipes when lack of field data on bacteria counts in the immediate area is insufficient, inconclusive or exceeds standards set in the National Shellfish Sanitation Program of the U.S. Department of Health and Human Services. The MEDMR issued the closure notice on February 6, 2007 based on ambient water quality sampling indicated elevated levels of bacteria.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

Compliance with the monthly average and daily maximum limitations for fecal coliform bacteria will ensure the Eastport waste water treatment facility will not cause or contribute to the closure of the shellfish harvesting area.

All estuarine and marine waters in Maine are listed in a table entitled, *Category 4-B-3: Estuarine and Marine Waters Impaired by Atmospheric Deposition of Mercury* of the aforementioned 305(b) report. Text in this category states that all waters in the category are partially supporting fishing (fish and shellfish consumption) due to elevated levels of mercury, PCBs and dioxin in tissues of some fish and lobster tomally. The MEDEP is not aware of any information that the Eastport waste water treatment facility is discharging PCBs or dioxin that may be causing or contributing to the partial non-attainment.

Pursuant to Maine law, 38 M.R.S.A. §420 and Department rule, 06-096 CMR Chapter 519, *Interim Effluent Limitations and Controls for the Discharge of Mercury*, the Department issued a *Notice of Interim Limits for the Discharge of Mercury* to the permittee thereby administratively modifying WDL # W002750-46-B-R by establishing interim monthly average and daily maximum effluent concentration limits of 237 parts per trillion (ppt) and 355 ppt, respectively, and a minimum monitoring frequency requirement of two tests per year for mercury. The interim mercury limits were scheduled to expire on October 1, 2001. However, effective June 15, 2001, the Maine Legislature enacted Maine law, 38 M.R.S.A. §413, sub-§11 specifying that interim mercury limits and monitoring requirements remain in effect. It is noted that the mercury effluent limitations have not been incorporated into Special Condition A, *Effluent Limitations And Monitoring Requirements*, of this permit as the limits and monitoring frequencies are regulated separately through Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. The interim mercury limits remain in effect and enforceable and modifications to the limits and/or monitoring frequencies will be formalized outside of the permitting document pursuant to Maine law, 38 M.R.S.A. §413 and Department rule Chapter 519. Maine law 38 M.R.S.A., §420 sub-§(1-B)(B)(1) states that a facility is not in violation of an ambient criteria for mercury if the facility is in compliance with an interim discharge limit established by the Department pursuant to §413, sub-§11.

D. Establishment of Monitoring Programs [40 CFR 125.63]

Federal regulation 40 CFR 125.63 requires that the applicant develop a monitoring program designed to evaluate the impact of the modified discharge on the marine biota, demonstrate compliance with applicable water quality standards, and measure toxic substances in the discharge. 40 CFR 125.63(a)(2) allows the Administrator to require revisions to the proposed monitoring program before issuance of a modified permit and during the term of any modified permit.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

(1) Establishment of Monitoring Program [40 CFR 125.63(a)(1)]

See the discussion in Section V(1) of this document.

(2) Small applicants are not subject to the requirements of 40 CFR 125.63(b)(1)(ii)-(iv) if they discharge at depths greater than 10 meters and can demonstrate through a suspended solids deposition analysis that there will be negligible seabed accumulation in the vicinity of the modified discharge [40 CFR 125.63(b)(2)]

See the discussion in Section V(1) of this document.

(3) For applicants seeking a section 301(h) modified permit based on an improved or altered discharge involving outfall relocation, the biological monitoring shall include the current discharge site until such discharge ceases (40 CFR 125.63(b)(3)(iii)(A)), and; shall provide baseline data at the relocation site (40 CFR 125.63(b)(3)(iii)(B))

See the discussion in Section V(1) of this document.

(4) Water Quality Monitoring Program [40 CFR 125.63(c)]

See the discussion in Section V(1) of this document.

(5) Effluent Monitoring Program [40 CFR 125.63(d)]

The draft NPDES permit contains monitoring conditions which shall provide data on the quality of the effluent including flow, BOD, TSS, settleable solids, total residual chlorine and pH.

E. Effect of Modified Discharge on Other Point and Nonpoint Sources [40 CFR 125.64]

40 CFR 125.64(a) states that no modified discharge may result in any additional pollution control requirements on any other point or nonpoint source.

40 CFR Part 125.64(b) requires that the applicant obtain a determination from the State or interstate agency having authority to establish waste load allocations indicating whether the applicant's discharge will result in any additional treatment pollution control, or other requirement on any other point or nonpoint source. The City of Eastport anticipates receiving said determination from the MEDEP prior to issuance of the final NPDES permit.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

F. Toxics Control Program [40 CFR 125.66]

(1) Identification of sources and Industrial Pretreatment Requirements [40 CFR 125.66(a)(1) and (2), 40 CFR 125.66(b), and 40 CFR 125.66(c)]

Given the nature of the source of the discharge, Eastport has determined to the best of their knowledge, there are no sources of toxic pollutants being conveyed to the treatment plant. Therefore, 40 CFR 125.66(a) - (c) does not apply.

(2) Nonindustrial Source Control Program [40 CFR 125.66(d)]

Under 40 CFR 125.66(d), the applicant must submit a proposed public education program designed to minimize the entrance of non-industrial toxic pollutants and pesticides into its POTW. See the discussion in Section V(F)(1) of this document.

G. Increase in Effluent Volume or Amount of Pollutants Discharged [40 CFR 125.67]

(1) 40 CFR 125.67(a) states that the applicant's discharge may not result in any new or substantially increased discharges of the pollutant to which the modification applies above the discharge specified in the Section 301(h) modified permit.

Effluent limits for BOD_5 and TSS are specified within the draft permit as follows:

Constituent	Monthly Average Limitations
BOD_5	203 mg/l (1,388 lbs/day)
TSS	145 mg/l (992 lbs/day)

The Eastport discharge will not result in any new or substantially increased discharge of these pollutants as the proposed limits are equal to the limits in the previous NPDES permitting action.

(2) 40 CFR 125.67(b) requires that, where pollutants discharges are attributable in part to combined sewer overflows, the applicant minimize existing overflows and prevent increases in the amount of pollutants discharged.

There are no CSO's associated with the Eastport collection system. Therefore, Eastport is in compliance with 40 CFR 125.67(b).

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

H. Special conditions for section 301(h) modified permits [40 CFR 125.68]

Each section 301(h) modified permit issued shall contain, in addition to all applicable terms and conditions required by 40 CFR part 122, the following:

(1) Effluent limits and mass loadings which will assure compliance with the requirements of this subpart (40 CFR 125.68(a)):

The draft NPDES permit contains such effluent limits and mass loadings.

(2) A schedule or schedules of compliance for (40 CFR 125.68(b)):

a. 40 CFR 125.68(b)(1), Pretreatment program development required by section 125.66(c).

The City of Eastport is not required to have a pretreatment program. Therefore, the permit does not contain a schedule for one.

b. 40 CFR 125.68(b)(2), Nonindustrial toxics control program required by section 125.66(d).

Given the nature of the source of the discharge Eastport has determined to the best of their knowledge, there are no sources of toxic pollutants being conveyed to the treatment plant. Therefore, 40 CFR 125.66(d) does not apply.

c. 40 CFR 125.68(b)(3), Control of combined sewer overflows required by section 125.67.

There are no CSO's associated with the Eastport collection system. Therefore Eastport is in compliance with 40 CFR 125.67.

3. Monitoring program requirements that include (40 CFR 125.68(c)):

a. 40 CFR 125.68(c)(1), Biological monitoring requirements of section 125.63(b).

See the discussion in Section V(1) of this document.

b. 40 CFR 125.68(c)(2), Water quality requirements of section 125.63(c).

See the discussion in Section V(1) of this document.

V. APPLICATION OF STATUTORY AND REGULATORY CRITERIA (cont'd)

c. 40 CFR 125.68(c)(3) Effluent monitoring requirements of sections 125.60(b), 125.62(c) and (d), and 125.63(d).

The draft NPDES permit contains appropriate effluent monitoring and reporting requirements to satisfy the above regulatory requirements.

4. Reporting requirements that include the results of the monitoring programs required by paragraph (c) of this section at such frequency as prescribed in the approved monitoring program (40 CFR 125.68(d)).

The draft NPDES permit contains monthly reporting of the results of effluent monitoring requirements specified by the permit.

VI. COMPLIANCE WITH PROVISIONS OF OTHER STATE, LOCAL OR FEDERAL LAWS

Pursuant to 40 CFR 125.59(b)(3), a modified NPDES permit may not be issued unless the proposed discharge complies with applicable provisions of state, local, or other federal laws or Executive Orders, including the Coastal Zone Management Act, 16 U.S.C. 1451 et seq., the Endangered Species Act, 16 U.S.C. 1531 et seq., and the Marine Protection, Research, and Sanctuaries Act 16 U.S.C. 1431 et seq. These requirements are discussed below.

A. State Coastal Zone Management Program

A copy of the draft NPDES permit is being sent to the Maine's State Planning Office for a consistency determination. With the expected Section 401 Water Quality Certification from the MEDEP, the EPA anticipates an affirmative consistency determination prior to issuance of the NPDES permit as a final agency action.

B. Endangered or Threatened Species

The United States Fish and Wildlife Service (USFWS) is responsible for making the determination that the Eastport discharge will not harm endangered or threatened species. The EPA will consult with USFWS on Endangered Species Act (ESA) requirements as the USFWS will be provided with a copy of 30-day formal draft permit.

The National Marine Fisheries Service (NMFS) is charged with implementing the ESA for marine species. EPA will consult with NMFS on ESA requirements at the same time as the Essential Fish Habitat consultation (see below).

VI. COMPLIANCE WITH PROVISIONS OF OTHER STATE, LOCAL OR FEDERAL LAWS

Both the USFWS and the NMFS agencies were provided with an opportunity to comment of the August 2002 NPDES permit. Neither agency object to the terms and conditions of the permit or recommended additional monitoring requirements. Being that discharge levels proposed in this draft permit are equivalent to the August 2002 levels, the EPA does not anticipate any objections to the proposed permitting action.

C. Marine Protection, Research and Sanctuaries Act

The discharge is not located near any marine or estuarine sanctuary designated under Title III of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended, or the Coastal Zone Management Act of 1972, as amended.

D. Essential Fish Habitat (EFH)

Under the 1996 Amendments (PL 104-297) to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq. (1998)), EPA is required to consult with the National Marine Fisheries Service (NMFS) if EPA's actions, or proposed actions that EPA funds, permits, or undertakes, "may adversely impact any essential fish habitat." 16 U.S.C. § 1855(b). The Amendments broadly define essential fish habitat as, "... those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." 16 U.S.C. § 1802(10). Adverse effect means any impact which reduces the quality and/or quantity of EFH. 50 C.F.R. § 600.910(a). Adverse effects may include direct (e.g., contamination or physical disruption), indirect (e.g., loss of prey, reduction in species' fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. Id.

EFH is only designated for species for which federal Fishery Management Plans exist (16 U.S.C. § 1855(b)(1)(A)). EFH designations were approved for New England by the U.S. Department of Commerce on March 3, 1999.

As the federal agency charged with authorizing the discharge from this facility, EPA is in the process of consulting with the National Marine Fisheries Service (NMFS) under section 305 (b)(2) of the Magnuson-Stevens Act for essential fish habitat (EFH). This consultation will be completed before the permit is finalized.

VII. STATE CONCURRENCE IN VARIANCE

Permittees may not be granted a Section 301(h) variance, as specified under Section 301(h) of the Act and 40 CFR 125.59(i), until the appropriate State certification/concurrence is granted or waived pursuant to 40 CFR 124.54. A Section 301(h) waiver may not be granted if the State denies certification/ concurrence pursuant to 40 CFR 124.54. EPA expects that the State of Maine will make such a determination upon review of the proposed draft permit conditions.

VIII. CONCLUSION

The EPA has determined that Eastport's treated effluent, will receive enough initial dilution and mixing such that the discharge will comply with all of the requirements of Section 301(h) of the Clean Water Act, as amended by the Water Quality Act of 1987, and 40 CFR Part 125, Subpart G.

IX. TENTATIVE DECISION

For the reasons discussed in this tentative decision document, EPA is tentatively approving Eastport's request to discharge primary effluent into Passamaquoddy Bay. This tentative decision is contingent upon the following conditions:

1. The Eastport treatment system maintaining 30 % removal of BOD_5 and 50% removal TSS (Maine BPT and Section 401 Water Quality Certification condition) , and;

2. State certification is granted under Section 401 of the Act, and;

3. The discharge will comply with all state water-quality standards.

This tentative decision will become final upon issuance of the NPDES permit.

Maine Department of Environmental Protection

Effluent Mercury Test Report

Name of Facility: _____ Federal Permit # ME _____

Purpose of this test:
- ☐ Initial limit determination
- ☐ Compliance monitoring for: year _____ calendar quarter _____
- ☐ Supplemental or extra test

SAMPLE COLLECTION INFORMATION

Sampling Date: ___ ___ ___ (mm dd yy) Sampling time: _____ AM/PM

Sampling Location:

Weather Conditions: _____

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

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

Suspended Solids _____ mg/L Sample type: _____ Grab (recommended) or _____ Composite

ANALYTICAL RESULT FOR EFFLUENT MERCURY

Name of Laboratory: _____

Date of analysis: _____ **Result:** _____ **ng/L (PPT)**

Please Enter Effluent Limits for your facility

Effluent Limits: **Average =** _____ ng/L **Maximum =** _____ ng/L

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

CERTIFICATION

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

By: _____ Date: _____

Title: _____

PLEASE MAIL THIS FORM TO YOUR ASSIGNED INSPECTOR

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WHOLE EFFLUENT TOXICITY REPORT
MARINE WATERS

Facility Name _____ MEPDES Permit # _____

Facility Representative _____ Signature _____

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

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

Chlorinated? _____ Dechlorinated? _____

Results **% effluent**

	mysid shrimp	sea urchin
A-NOEL		
C-NOEL		

Effluent Limitations

A-NOEL	
C-NOEL	

Data summary

	mysid shrimp	sea urchin
	% survival	% fertilized
QC standard	>90	>70
lab control		
receiving 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

Salinity Adjustment

brine	
sea salt	
other	

Reference toxicant

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

Comments _____

Laboratory conducting test

Company Name _____ Company Rep. Name (Printed) _____

Mailing Address _____ Company Rep. Signature _____

City, State, ZIP _____ Company Telephone # _____

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

Printed 2/21/2007

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
This form is for reporting laboratory data and facility information. Official compliance reviews will be done by

Facility Name _____ **MEPDES #** _____ **Pipe #** _____ Facility Representative Signature _____ To the best of my knowledge this information

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

Flow for Day (MGD)[1] _____ **Flow Avg. for Month (MGD)**[2] _____

Date Sample Collected _____ Date Sample Analyzed _____

Laboratory _____ Telepl
Address _____
_____
Lab Contact _____ Lab

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

FRESH WATER VERSION

Please see the footnotes on the last page.

			Effluent Limits, %			Receiving Water or Ambient	**Effluent Concentration** (ug/L or as noted)		
	WHOLE EFFLUENT TOXICITY		Acute	Chronic			WET Result, % Do not enter % sign	Reporting Limit Check	**Pos** Acute
	Trout - Acute								
	Trout - Chronic								
	Water Flea - Acute								
	Water Flea - Chronic								
	WET CHEMISTRY								
	pH (S.U.) (9)					(8)			
	Total Organic Carbon (mg/L)					(8)			
	Total Solids (mg/L)								
	Total Suspended Solids (mg/L)								
	Alkalinity (mg/L)					(8)			
	Specific Conductance (umhos)								
	Total Hardness (mg/L)					(8)			
	Total Magnesium (mg/L)					(8)			
	Total Calcium (mg/L)					(8)			
	ANALYTICAL CHEMISTRY [3]								
	Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L Acute[6]	Chronic[6]	Health[6]			Reporting Limit Check	**Pos** Acute
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA			
	AMMONIA	NA				(8)			
M	ALUMINUM	NA				(8)			
M	ARSENIC	5				(8)			
M	CADMIUM	1				(8)			
M	CHROMIUM	10				(8)			
M	COPPER	3				(8)			
M	CYANIDE	5				(8)			
M	LEAD	3				(8)			
M	NICKEL	5				(8)			
M	SILVER	1				(8)			
M	ZINC	5				(8)			

Printed 2/21/2007

Maine Department of Environmental Protection
WET and Chemical Specific Data Report Form
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Facility Name _____ **MEPDES #** _____ **Pipe #** _____ Facility Representative Signature _____
To the best of my knowledge this information is true, accurate and complete.

Licensed Flow (MGD)		**Flow for Day (MGD)[1]**	**Flow Avg. for Month (MGD)[2]**
Acute dilution factor			
Chronic dilution factor		**Date Sample Collected**	Date Sample Analyzed
Human health dilution factor			
Criteria type: M(arine) or F(resh)	m		

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

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

MARINE AND ESTUARY VERSION

Please see the footnotes on the last page.

			Effluent Limits, %			Receiving Water or Ambient	**Effluent Concentration (ug/L or as noted)** WET Result, % Do not enter % sign	Reporting Limit Check	**Possible Exceedence [7]** Acute	Chronic	
	WHOLE EFFLUENT TOXICITY		Acute	Chronic							
	Mysid Shrimp										
	Sea Urchin										
	WET CHEMISTRY										
	pH (S.U.) (9)					(8)					
	Total Organic Carbon (mg/L)					NA					
	Total Solids (mg/L)					NA					
	Total Suspended Solids (mg/L)					NA					
	Salinity (ppt.)										

	ANALYTICAL CHEMISTRY [3] Also do these tests on the effluent with WET. Testing on the receiving water is optional	Reporting Limit	Effluent Limits, ug/L Acute[6]	Chronic[6]	Health[6]		Reporting Limit Check	**Possible Exceedence [7]** Acute	Chronic	Health
	TOTAL RESIDUAL CHLORINE (mg/L) (9)	0.05				NA				
	AMMONIA	NA				(8)				
M	ALUMINUM	NA				(8)				
M	ARSENIC	5				(8)				
M	CADMIUM	1				(8)				
M	CHROMIUM	10				(8)				
M	COPPER	3				(8)				
M	CYANIDE	5				(8)				
M	LEAD	3				(8)				
M	NICKEL	5				(8)				
M	SILVER	1				(8)				
M	ZINC	5				(8)				

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

Maine Department of Environmental Protection
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BN	FLUORANTHENE	5									
BN	FLUORENE	5									
BN	HEXACHLOROBENZENE	2									
BN	HEXACHLOROBUTADIENE	1									
BN	HEXACHLOROCYCLOPENTADIENE	10									
BN	HEXACHLOROETHANE	2									
BN	INDENO(1,2,3-CD)PYRENE	5									
BN	ISOPHORONE	5									
BN	N-NITROSODI-N-PROPYLAMINE	10									
BN	N-NITROSODIMETHYLAMINE	1									
BN	N-NITROSODIPHENYLAMINE	5									
BN	NAPHTHALENE	5									
BN	NITROBENZENE	5									
BN	PHENANTHRENE	5									
BN	PYRENE	5									
P	4,4'-DDD	0.05									
P	4,4'-DDE	0.05									
P	4,4'-DDT	0.05									
P	A-BHC	0.2									
P	A-ENDOSULFAN	0.05									
P	ALDRIN	0.15									
P	B-BHC	0.05									
P	B-ENDOSULFAN	0.05									
P	CHLORDANE	0.1									
P	D-BHC	0.05									
P	DIELDRIN	0.05									
P	ENDOSULFAN SULFATE	0.1									
P	ENDRIN	0.05									
P	ENDRIN ALDEHYDE	0.05									
P	G-BHC	0.15									
P	HEPTACHLOR	0.15									
P	HEPTACHLOR EPOXIDE	0.1									
P	PCB-1016	0.3									
P	PCB-1221	0.3									
P	PCB-1232	0.3									
P	PCB-1242	0.3									
P	PCB-1248	0.3									
P	PCB-1254	0.3									
P	PCB-1260	0.2									
P	TOXAPHENE	1									
V	1,1,1-TRICHLOROETHANE	5									
V	1,1,2,2-TETRACHLOROETHANE	7									
V	1,1,2-TRICHLOROETHANE	5									
V	1,1-DICHLOROETHANE	5									
V	1,1-DICHLOROETHYLENE (1,1-dichloroethene)	3									
V	1,2-DICHLOROETHANE	3									
V	1,2-DICHLOROPROPANE	6									
V	1,2-TRANS-DICHLOROETHYLENE (1,2-trans-dichloroethene)	5									
V	1,3-DICHLOROPROPYLENE (1,3-dichloropropene)	5									
V	2-CHLOROETHYLVINYL ETHER	20									

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

Notes:

(1) Flow average for day pertains to WET/PP composite sample day.

(2) Flow average for month is for month in which WET/PP sample was taken.

(3) Analytical chemistry parameters must be done as part of the WET test chemistry.

(4) Priority Pollutants should be reported in micrograms per liter (ug/L).

(5) Mercury is often reported in nanograms per liter (ng/L) by the contract laboratory, so be sure to convert to micrograms per liter on this spreadsheet.

(6) Effluent Limits are calculated based on dilution factor, background allocation (10%) and water quality reserves (15% - to allow for new or changed discharges or non-point sources).

(7) Possible Exceedence determinations are done for a single sample only on a mass basis using the actual pounds discharged. This analysis does not consider watershed wide allocations for fresh water discharges.

(8) These tests are optional for the receiving water. However, where possible samples of the receiving water should be preserved and saved for the duration of the WET test. In the event of questions about the receiving water's possible effect on the WET results, chemistry tests should then be conducted.

(9) pH and Total Residual Chlorine must be conducted at the time of sample collection. Tests for Total Residual Chlorine need be conducted only when an effluent has been chlorinated or residual chlorine is believed to be present for any other reason.

Comments:

CONTENTS

A. GENERAL PROVISIONS

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

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

(a) They are not

(i) Designated as toxic or hazardous under the provisions of Sections 307 and 311, respectively, of the Federal Water Pollution Control Act; Title 38, Section 420, Maine Revised Statutes; or other applicable State Law; or
(ii) Known to be hazardous or toxic by the licensee.

(b) The discharge of such materials will not violate applicable water quality standards.

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

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

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

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

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

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

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

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

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

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

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

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

B. OPERATION AND MAINTENACE OF FACILITIES

1. General facility requirements.

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

maximize removal of pollutants unless authorization to the contrary is obtained from the Department.

(b) The permittee shall at all times maintain in good working order and operate at maximum efficiency all waste water collection, treatment and/or control facilities.

(c) All necessary waste treatment facilities will be installed and operational prior to the discharge of any wastewaters.

(d) Final plans and specifications must be submitted to the Department for review prior to the construction or modification of any treatment facilities.

(e) The permittee shall install flow measuring facilities of a design approved by the Department.

(f) The permittee must provide an outfall of a design approved by the Department which is placed in the receiving waters in such a manner that the maximum mixing and dispersion of the wastewaters will be achieved as rapidly as possible.

2. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

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

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

5. Bypasses.

(a) Definitions.

(i) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

(ii) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

(c) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph D(1)(f), below. (24-hour notice).

(d) Prohibition of bypass.

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
(C) The permittee submitted notices as required under paragraph (c) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (d)(i) of this section.

6. Upsets.

(a) Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(c) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;
(ii) The permitted facility was at the time being properly operated; and
(iii) The permittee submitted notice of the upset as required in paragraph D(1)(f) , below. (24 hour notice).
(iv) The permittee complied with any remedial measures required under paragraph B(4).

(d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

C. MONITORING AND RECORDS

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

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

3. Monitoring and records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(c) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;
(ii) The individual(s) who performed the sampling or measurements;
(iii) The date(s) analyses were performed;
(iv) The individual(s) who performed the analyses;
(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.

(e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, §349.

D. REPORTING REQUIREMENTS

1. Reporting requirements.

(a) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D(4).

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

(b) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. This permit is not transferable to any person except upon application to and approval of the Department pursuant to 38 MRSA, § 344 and Chapters 2 and 522.

(d) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(e) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance

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

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

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit.
(B) Any upset which exceeds any effluent limitation in the permit.
(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

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

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

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

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

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

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

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

(i) One hundred micrograms per liter (100 ug/l);
(ii) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

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

(i) Five hundred micrograms per liter (500 ug/l);
(ii) One milligram per liter (1 mg/l) for antimony;
(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with Chapter 521 Section 4(g)(7); or
(iv) The level established by the Department in accordance with Chapter 523 Section 5(f).

5. Publicly owned treatment works.

(a) All POTWs must provide adequate notice to the Department of the following:

(i) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA or Chapter 528 if it were directly discharging those pollutants.
(ii) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
(iii) For purposes of this paragraph, adequate notice shall include information on (A) the quality and quantity of effluent introduced into the POTW, and (B) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

(b) When the effluent discharged by a POTW for a period of three consecutive months exceeds 80 percent of the permitted flow, the permittee shall submit to the Department a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans.

E. OTHER REQUIREMENTS

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

(a) For municipal sources. During power failure, all wastewaters which are normally treated shall receive a minimum of primary treatment and disinfection. Unless otherwise approved, alternate power supplies shall be provided for pumping stations and treatment facilities. Alternate power supplies shall be on-site generating units or an outside power source which is separate and independent from sources used for normal operation of the wastewater facilities.

(b) For industrial and commercial sources. The permittee shall either maintain an alternative power source sufficient to operate the wastewater pumping and treatment facilities or halt, reduce or otherwise control production and or all discharges upon reduction or loss of power to the wastewater pumping or treatment facilities.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Maximum daily discharge limitation means the highest allowable daily discharge.

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

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

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

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

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

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

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

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

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

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

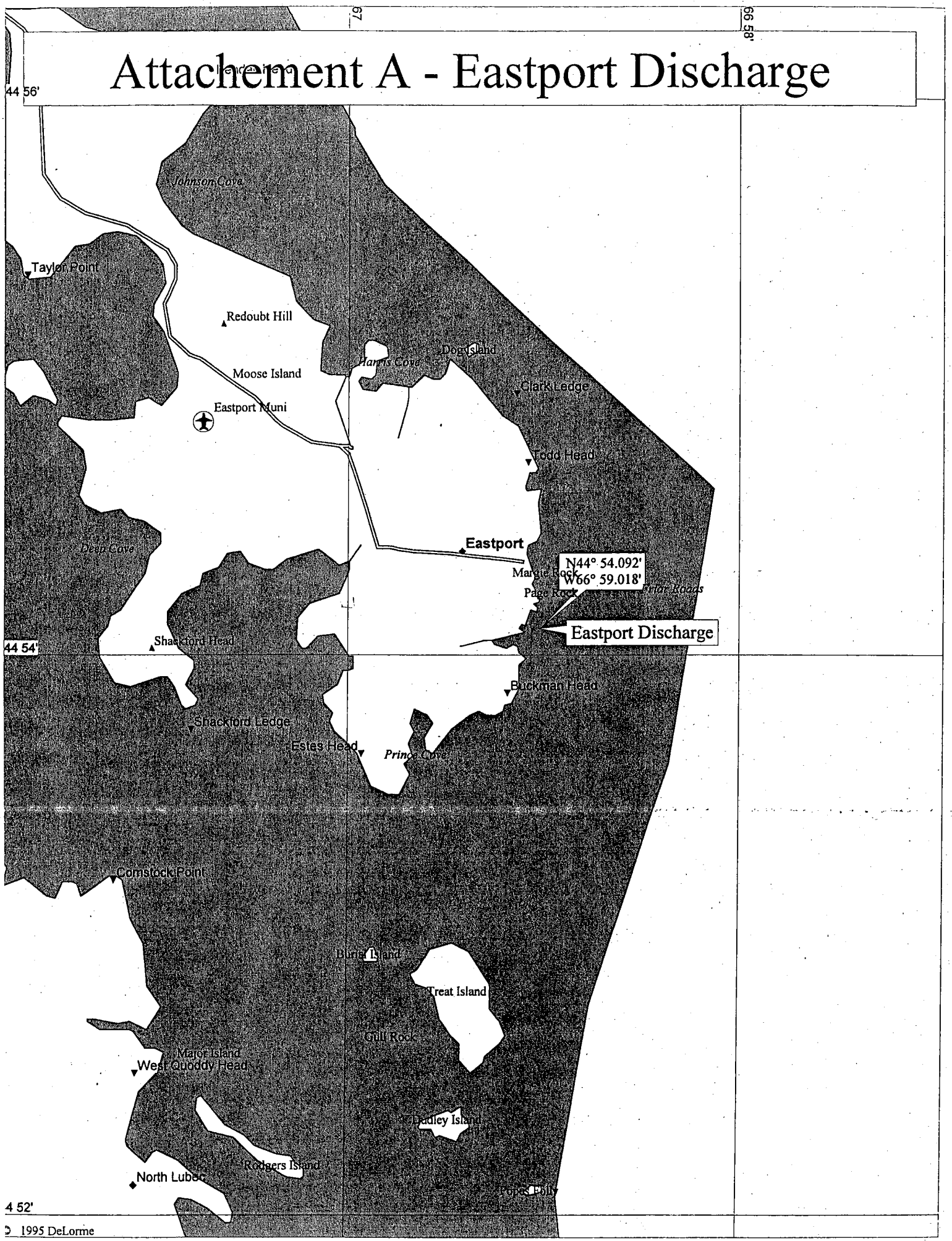
Time weighted composite means a composite sample consisting of a mixture of equal volume aliquots collected over a constant time interval.

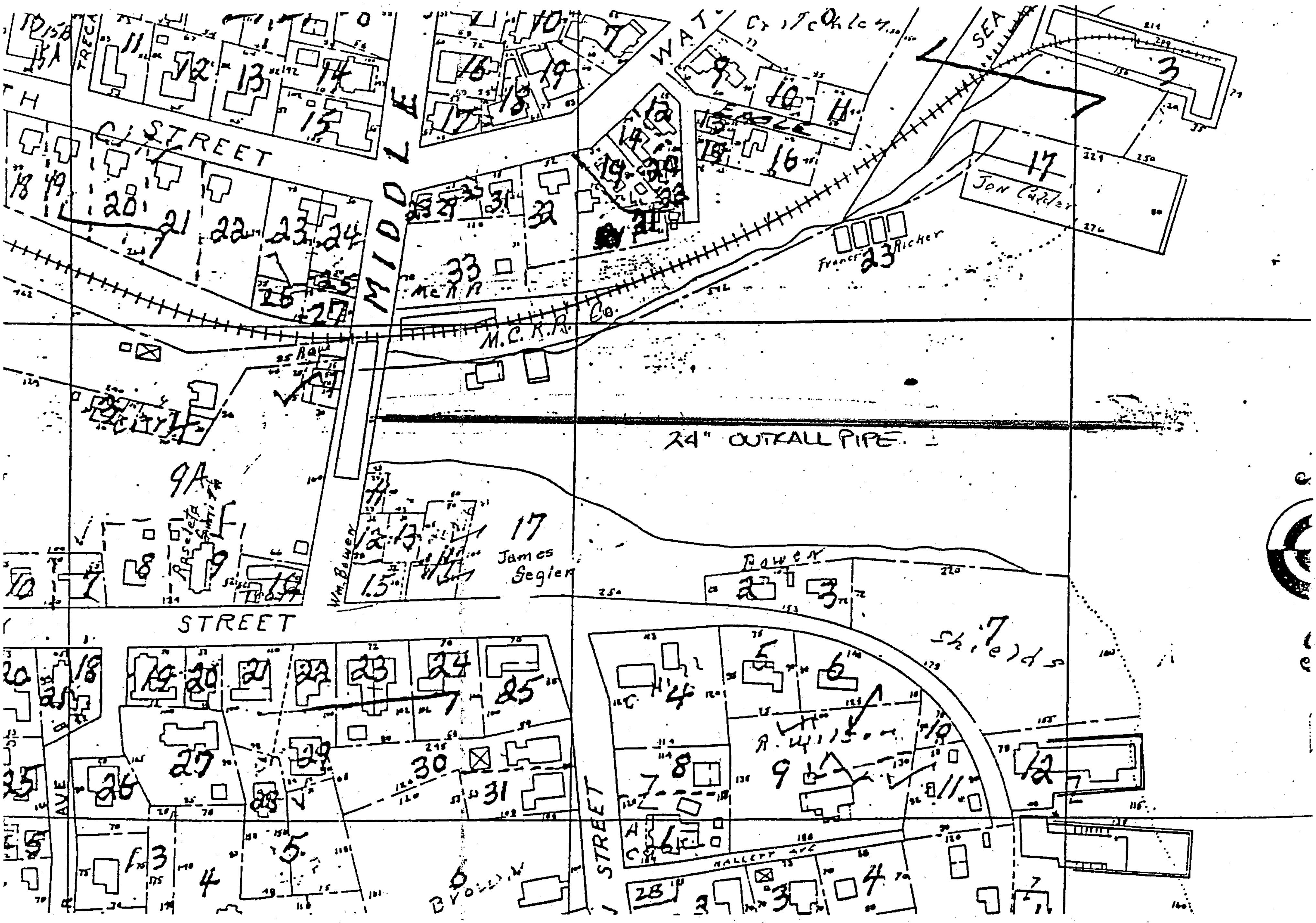
Toxic pollutant includes any pollutant listed as toxic under section 307(a)(1) or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA. Toxic pollutant also includes those substances or combination of substances, including disease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

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

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

Attachement A - Eastport Discharge

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STREET
C STREET
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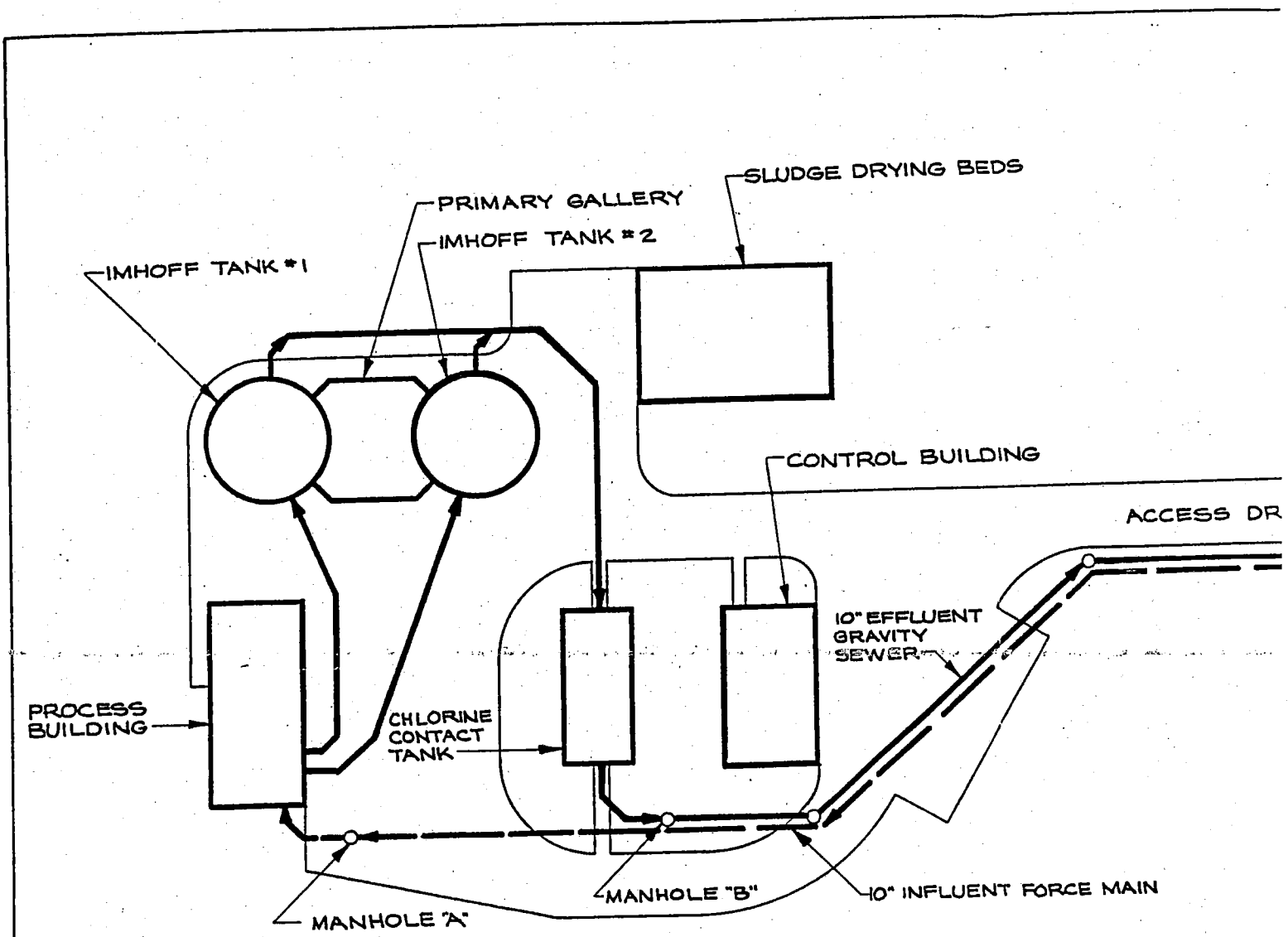
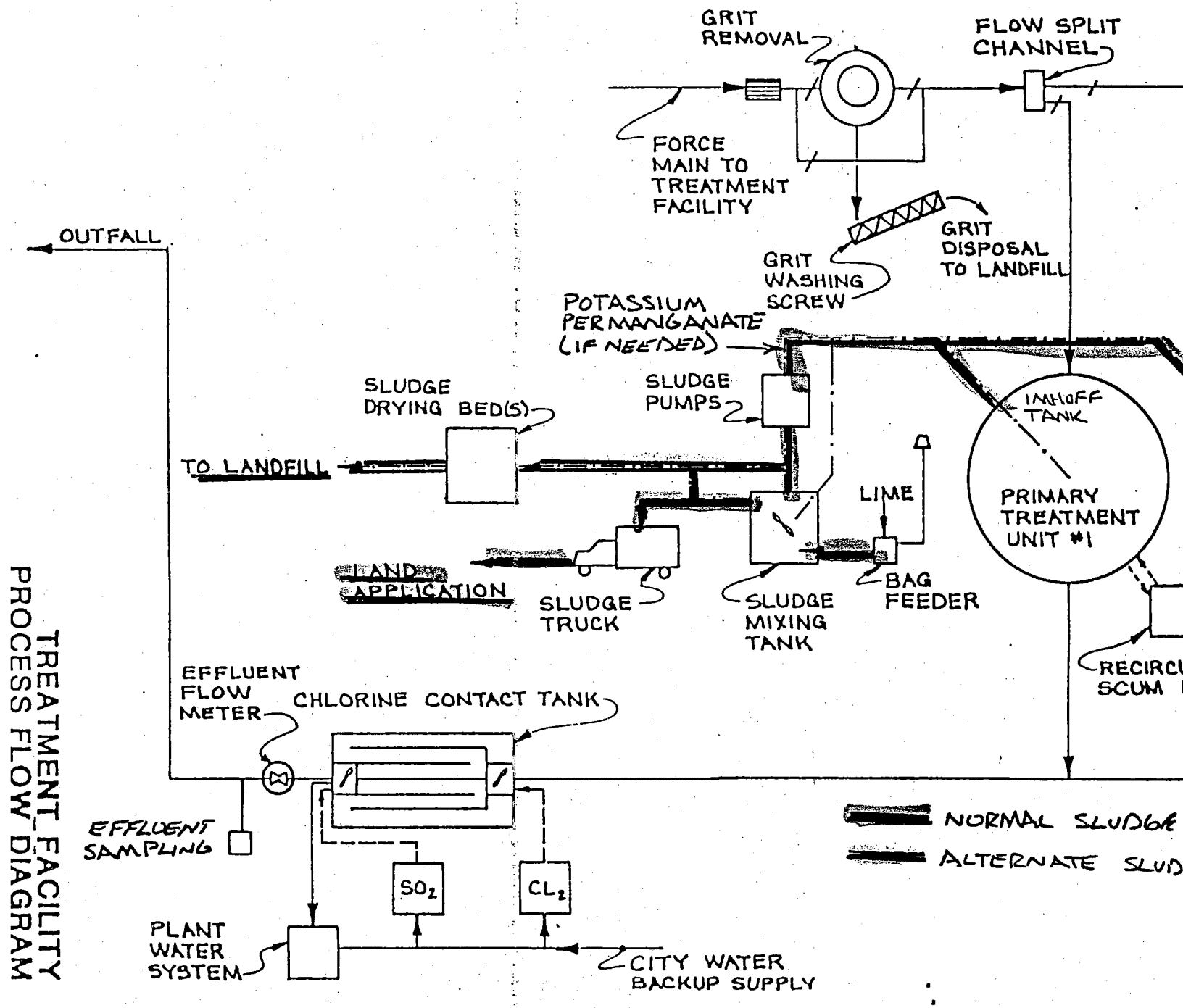
R. Wilson
HALLETT AVE
AVE
SEA
WAT



NOT TO SCALE

EASTPORT (MAIN) # W2598-5L-C-R
NPDES # ME0100200
FLOW SCHEMATIC

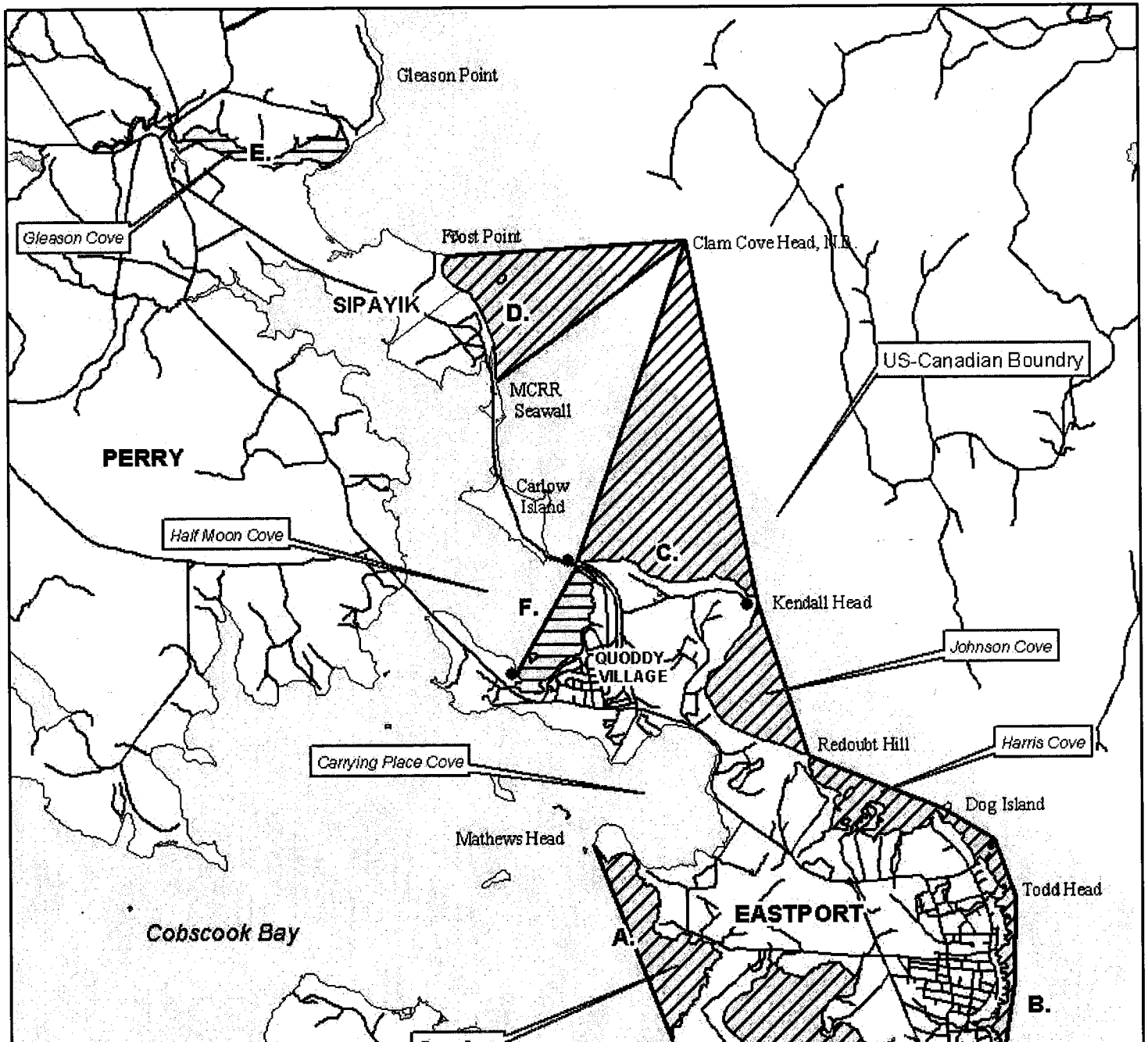
TREATMENT FACILITY PROCESS FLOW DIAGRAM

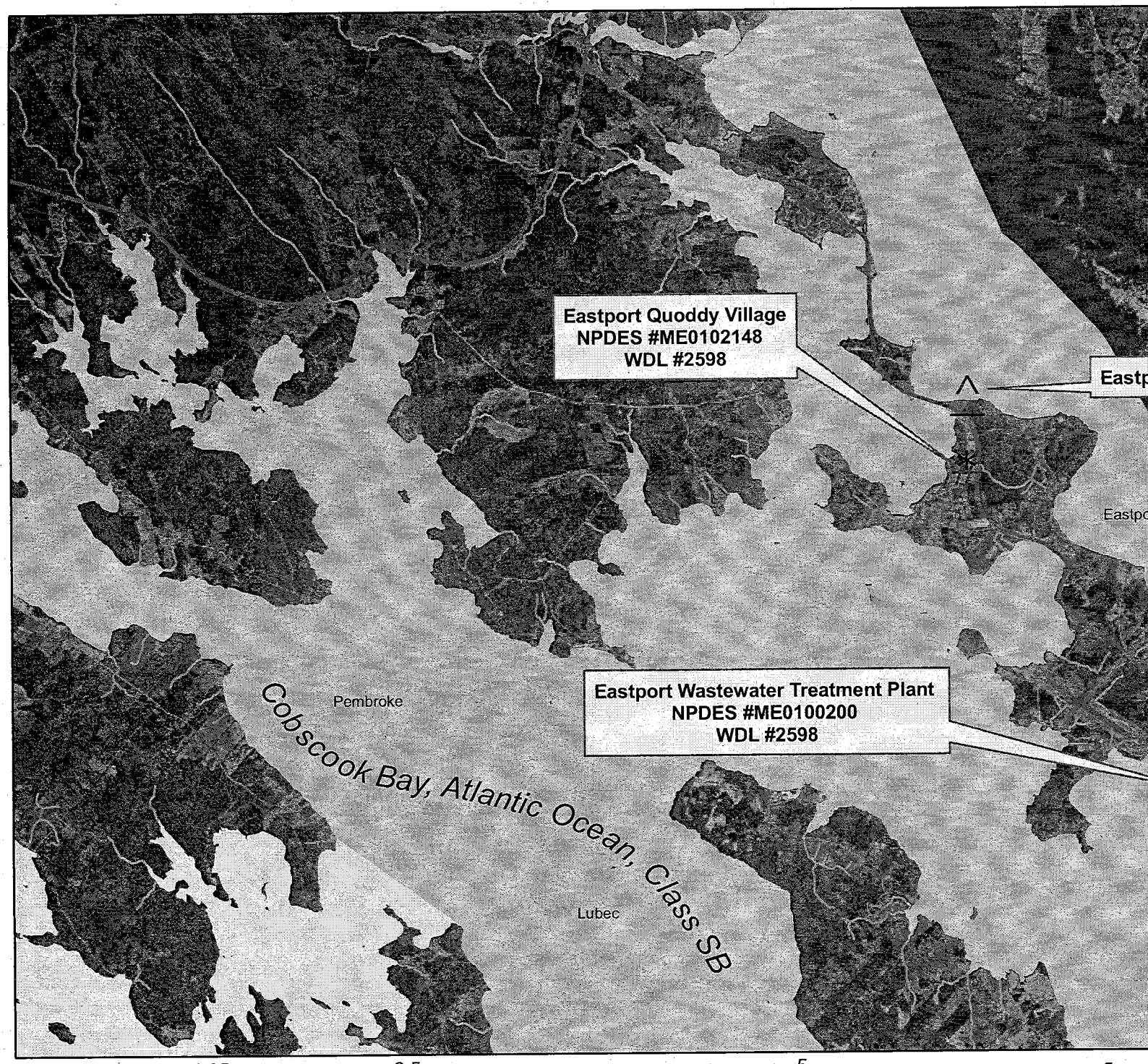


Maine Department of Marine Resources

Pollution Closed Area No. 59

Outer Cobscook Bay (Eastport and Perry) 02/06/07





Eastport Quoddy Village and Main Plant at Eastport, Maine